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BUREAU OF THE CENSUS

Flour Milling Products

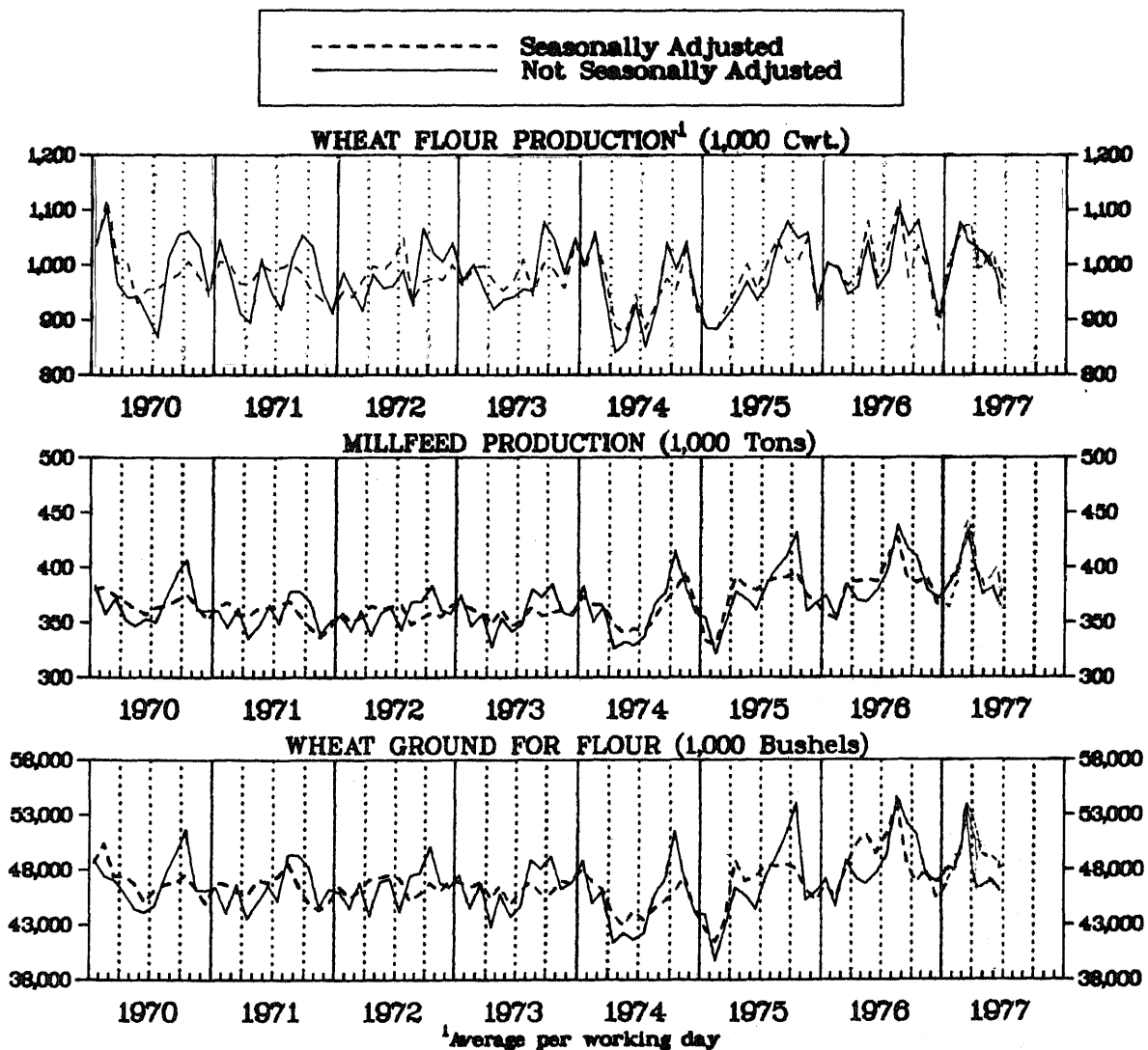
JULY 1977

M20A(77)-7
Issued August 1977

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plete description of this survey appears on page 5. An annual current industrial report is published in this series and includes all the months for the current and previous years and incorporates all known revisions in the series.

WHEAT FLOUR MILLING: 1970 TO 1977



Address inquiries concerning these figures to U.S. Department of Commerce, Bureau of the Census, Industry Division, Washington, D.C. 20233, or call Thomas Flood, (301) 763-2415.

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TABLE 1A.--SUMMARY OF WHEAT FLOUR MILLING: 1975 TO 1977

(Seasonally adjusted)

Month and year	Wheat flour production average per working day ¹ (1,000 cwt)	Millfeed production (1,000 tons)	Wheat flour for flour (1,000 bushels)
1977			
July.....	967	355	45,240
June.....	953	374	48,038
May.....	1,027	398	49,079
April.....	1,005	387	49,469
March.....	1,075	433	53,789
February.....	1,072	387	48,754
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Note: Data include from 2- to 5-percent estimation for nonresponse. The data for 1974 and 1975 have been revised based on the new seasonal factors as shown in the April 1976 publication.

¹The number of working days per month is computed on the basis of a 5-day week with allowances for the following holidays: January 1, Memorial Day, Independence Day, Thanksgiving Day, and December 25.

TABLE 1B.--SUMMARY OF WHEAT FLOUR MILLING: 1975 TO 1977

(Not seasonally adjusted)

Month and year	Wheat flour production (1,000 cwt.)		Millfeed production (tons)	Wheat ground for flour (1,000 bushels)	Wheat flour mill stocks ² (1,000 cwt.)	Daily 24-hour capacity in wheat flour ² (1,000 cwt.)	Wheat flour produced as percent of capacity	Flour extraction rate ³ (percent)
	Average per working day ¹	Calendar month total						
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July.....	924	19,401	344,953	43,521	(NA)	957	96.5	74.3
June.....	933	20,529	366,513	46,261	4,167	957	97.5	74.0
May.....	993	20,861	375,128	46,870	(NA)	976	101.8	74.2
April.....	982	20,632	369,798	46,402	(NA)	976	100.7	74.1
March.....	1,057	24,321	430,120	54,434	4,248	976	108.3	74.5
February.....	1,071	21,425	385,212	48,023	(NA)	990	108.2	74.4
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August.....	1,103	24,257	437,548	54,634	(NA)	990	111.4	74.0
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July.....	962	21,156	383,995	47,430	(NA)	988	97.4	74.3
June.....	935	19,631	361,216	44,375	4,434	988	94.6	73.7

Note: Data included estimates for small mills.

(NA) Not available.

¹The number of working days per month is computed on the basis of a 5-day week with allowances for the following holidays: January 1, Memorial Day, Independence Day, Thanksgiving Day, and December 25.

²Collected quarterly.

³Wheat flour production as compared with amount of wheat ground.

TABLE 2.--DURUM WHEAT AND RYE: FLOUR PRODUCTION, GRAIN CONSUMPTION,
MILL STOCKS AND CAPACITY

PRODUCT CODE	DESCRIPTION OF ITEM	UNIT OF MEASURE	JULY 1977 QUANTITY	JUNE 1977 QUANTITY	JULY 1976 QUANTITY
	DURUM WHEAT (INCLUDED IN TABLE 1 DATA):				
0011173	DURUM WHEAT GROUND.	M BU	2,601	2,781	2,438
2041153	STRAIGHT SEMOLINA DURUM FLOUR.	M CWT	1,147	1,245	1,043
2041155	BLENDED SEMOLINA DURUM FLOUR.	DO	(D)	(D)	(D)
	RYE:				
0011951	RYE GROUND FOR FLOUR.	M BU	263	277	305
2041611	RYE FLOUR PRODUCTION.	M CWT	126	131	137
2041618	RYE MILLFEED PRODUCTION.	TONS	1,378	1,389	1,680
2041611	RYE FLOUR STOCKS (1).	M CWT	(NA)	21	399
	24 HOUR CAPACITY (1).	DO	10	10	8

Note: Data include estimates for small mills. Detail may not add to total due to independent rounding. These data exclude all flour blended by macaroni and spaghetti manufacturers, etc., as such activities are not within scope of this survey. Only mills engaged in milling flour or meal are included in this survey.

(D) Withheld to avoid disclosure of figures for individual companies.

(NA) Not available.

¹Collected quarterly.

TABLE 3.--WHEAT GROUND FOR FLOUR AND WHEAT FLOUR PRODUCTION BY DIVISIONS AND STATES

GEOGRAPHIC AREA	JULY 1977		JUNE 1977		JULY 1976	
	WHEAT GROUND FOR FLOUR (1,000 BUSHELS)	WHEAT FLOUR PRODUC- TION (1,000 CWT.1)	WHEAT GROUND FOR FLOUR (1,000 BUSHELS)	WHEAT FLOUR PRODUC- TION (1,000 CWT.)	WHEAT GROUND FOR FLOUR (1,000 BUSHELS)	WHEAT FLOUR PRODUC- TION (1,000 CWT.)
UNITED STATES, TOTAL.	43,521	19,401	46,261	20,529	49,272	21,751
MIDDLE ATLANTIC.	5,628	2,525	6,194	2,781	6,053	2,678
NEW YORK.	4,775	2,153	5,213	2,353	5,224	2,321
NORTH CENTRAL.	24,065	10,725	25,324	11,204	27,825	12,266
OHIO.	2,631	1,124	2,474	1,052	3,034	1,312
INDIANA.	1,201	510	1,291	547	1,325	560
ILLINOIS.	2,666	1,158	2,975	1,295	2,699	1,154
MICHIGAN.	709	313	765	337	735	315
MINNESOTA.	5,466	2,516	5,715	2,602	5,584	2,514
IOWA.	(D)	(D)	(D)	(D)	(D)	365
MISSOURI.	3,989	1,763	4,189	1,862	4,604	2,043
NEBRASKA.	1,073	469	1,276	556	1,614	677
KANSAS.	4,876	2,224	5,068	2,265	6,625	2,964
SOUTH ATLANTIC.	2,371	1,009	2,667	1,134	2,623	1,143
EAST SOUTH CENTRAL.	2,385	1,033	2,628	1,136	2,551	1,102
TENNESSEE.	1,846	802	2,109	915	1,977	855
WEST SOUTH CENTRAL.	2,682	1,210	3,029	1,354	3,252	1,435
OKLAHOMA.	1,285	585	1,358	615	1,597	722
TEXAS.	1,263	565	1,413	622	1,417	607
MOUNTAIN.	2,628	1,177	2,564	1,153	2,929	1,298
MONTANA.	581	274	552	266	671	309
UTAH.	(D)	(D)	(D)	(D)	(D)	(D)
PACIFIC.	3,762	1,722	3,855	1,767	3,989	1,829
WASHINGTON.	1,131	512	1,096	497	1,312	591
OREGON.	662	295	692	310	660	293
CALIFORNIA AND HAWAII.	1,969	915	2,067	960	2,017	945

Note: Detail may not add to total due to independent rounding.

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¹Revised by 5 percent or more from previously published figures.

TABLE 4.--EXPORTS OF WHEAT FLOUR

(1,000 cwt.)

Country to which exported	May 1977	May 1977	6 months through June 1977
WHEAT FLOUR, EXCEPT MEAL AND GROATS, DONATED FOR RELIEF OR CHARITY (0460110)			
Total.....	356	223	1,598
Egypt.....	-	93	236
Guatemala.....	-	-	78
Colombia.....	-	21	44
Ecuador.....	-	2	3
Brazil.....	-	-	5
Israel.....	-	7	47
India.....	12	3	29
Chile.....	35	18	124
Sri Lanka (Ceylon).....	24	-	73
Philippine Republic.....	21	24	126
Morocco.....	37	3	276
Other.....	227	52	557
WHEAT FLOUR, WHOLLY U.S. WHEAT, EXCEPT DURUM FLOUR AND SEMOLINA (0460120)			
Total.....	1,241	1,842	12,389
Nicaragua.....	3	-	15
Jamaica.....	15	2	135
Brazil.....	-	-	-
Iceland.....	15	9	47
Jordan.....	-	16	110
Saudi Arabia.....	559	337	2,546
Sri Lanka (Ceylon).....	452	207	2,787
Egypt.....	58	1,076	5,702
Philippine Republic.....	-	-	12
Korean Republic.....	-	-	-
Morocco.....	-	-	-
Other.....	139	195	1,035

Note: Data in this table are taken from Foreign Trade publication FT 410, U.S. Exports. The Schedule B codes are as follows: 0460110; wheat flour (except meal and groats); 0460120; wheat flour (wholly of U.S. wheat, except durum flour and semolina).

- Represents zero.

DESCRIPTION OF SURVEY

Scope of Survey—This survey includes firms engaged in the production of wheat and rye flour. The reporting panel consists of mills with a daily capacity of over 400 sacks of flour.

Sampling Description—The data shown in this publication were collected on Bureau of the Census monthly Form M-20A, Flour Milling Products. The aggregates published in this report have been compiled from a sample of approximately 250 respondents accounting for 98 percent of the total U.S. production of flour mill products. The universe for this sample was the 1958 Census of Manufactures. Approximately 200 small establishments are in the nonmail universe. Their production data are estimated based upon their 1958 Census of Manufactures report. The monthly reporting panel was selected by arraying the reporting units in descending order by size for each product line, then choosing a sufficient number of respondents (beginning with the largest) to yield a coverage of approximately 98 percent for each product line.

Survey Error—The current month's figures include estimates for respondents in the reporting panel whose reports were not received in time for tabulation, as well as for 200 small respondents excluded from the mail panel. Missing figures for companies in the reporting panel are imputed from the month-to-month movements shown by reporting firms. The overall imputation rate is generally limited to 12 percent, including about 2 percent for small respondents excluded from the monthly reporting panel. Individual items with a higher than 12-percent imputation rate are footnoted.

The imputation rate is not an explicit indicator of the potential error in published figures due to nonresponse, both because the actual monthly movements for nonrespondents may or may not closely agree with the imputed movements, and because the estimates for nonpanel cases may or may not reflect their current activity. The probable difference between the actual and imputed figures is unknown. The degree of uncertainty regarding the accuracy of the data, however, increases as the percentage of imputation increases. Figures with imputation rates above 12 percent, particularly, should be used with caution.

Revision to Previous Period Data—Statistics for previous months may be revised due to receipt of corrected data from respondents, including late reports for which estimates were made, and other corrections. Figures which have been revised by more than 5 percent from previously published figures are indicated by footnotes.

Reporting Period Adjustment—Beginning January 1975, the data were adjusted for the number of working days in the reporting period to compensate for differences in individual company reporting patterns, i.e., calendar month, 4-week, 5-week periods.

Seasonal Adjustment—This report presents seasonally adjusted data in table 1A for selected series shown in table 1B. The data were seasonally adjusted using the X-11 variant of the Bureau of the Census method II seasonal adjustment program. This seasonal adjustment program is a ratio-to-moving-average method. The seasonal adjustment program largely eliminates the effect of seasonal variations (intra-year variations repeated constantly from year to year) within the series. The seasonally adjusted data usually provide a better measure than the not seasonally adjusted (original) data of the month-to-month variations which are due to factors other than seasonal pattern.

EXPLANATION OF TERMS

Units of Quantity—Grain ground is measured in bushels of 60 pounds for wheat, 56 pounds for rye. Flour production is measured in sacks of 100 pounds.

Capacity—Based on replies to the question "What is the maximum quantity of flour that can be produced in your mill in one day if operated for 24 hours?" The capacity of idle mills is included until the mills are reported to be destroyed, dismantled, or abandoned.

Grain—Represents the purchased weight of grain ground, including the weight of foreign material (dockage).

Millfeed—Includes bran, middlings, shorts, and other milling byproducts intended principally for use as feed materials.

Wheat Flour—Includes whole wheat flour, farina, industrial flour, and durum flour.

Stocks of Flour (quarterly)—Represents mill stocks in all positions, sold and unsold.

RELATED REPORTS

An annual current industrial report is published in this series. The annual report summarizes monthly figures and incorporates all known revisions in the series for both current and previous year, thus providing a single reference copy to replace the monthly publications. This annual summary provides additional information on the history of this survey.

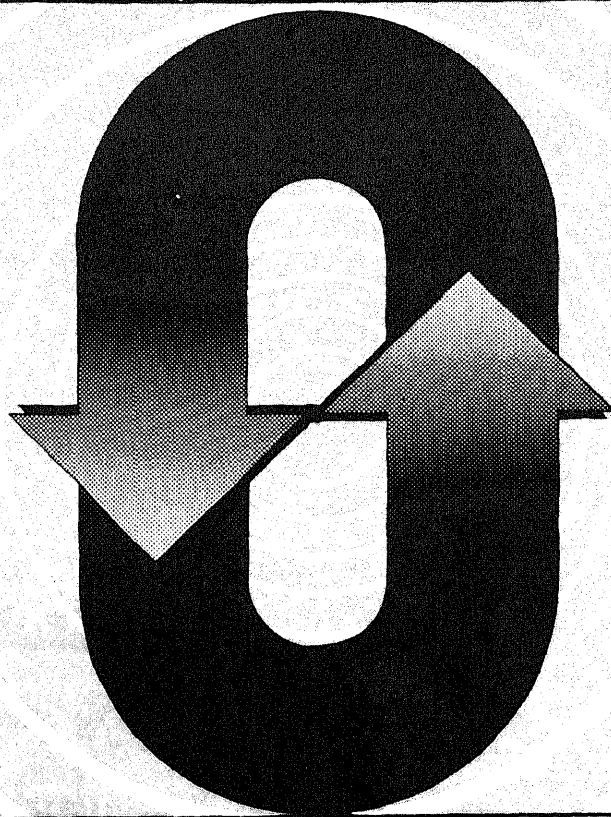
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Series	Frequency	Title
<i>Current Industrial Reports</i>		
M3-1	Monthly	Manufacturers' Shipments, Inventories, and Orders
M20C	Monthly	Confectionery, Including Chocolate Products
<i>Foreign Trade Reports</i>		
FT-410	Monthly	U.S. Exports—Schedule B—Commodity by Country
FT-135	Monthly	U.S. General Imports—Schedule A—Commodity by Country

CONTACTS FOR DATA USERS

Subject Area	Contact	Phone Number
Current Industrial Report M20A	Thomas Flood	(301) 763-2415
Foreign Trade publications	Paul Finn	(301) 763-5140
Bureau of Domestic Commerce	J.D. Morrissey	(202) 377-4793
To order a Census publication	Daisy Williams	(301) 763-7472
To order microfilm of Census publications	Theresa Allen	(301) 763-5042

Waste Heat Management Guidebook



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Find the answers to your problems in the *Waste Heat Management Guidebook*, a new handbook from the Commerce Department's National Bureau of Standards and the Federal Energy Administration.

The *Waste Heat Management Guidebook* is designed to help you, the cost-conscious engineer or manager, learn how to capture and recycle heat that is normally lost to the environment during industrial and commercial processes.

The heart of the guidebook is 14 case studies of companies that have recently installed waste heat recovery systems and profited. One of these applications may be right for you, but even if it doesn't fit exactly, you'll find helpful approaches to solving many waste heat recovery problems.

In addition to case studies, the guidebook contains information on:

- sources and uses of waste heat
- determining waste heat requirements
- economics of waste heat recovery
- commercial options in waste heat recovery equipment
- instrumentation
- engineering data for waste heat recovery
- assistance for designing and installing waste heat systems

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The *Waste Heat Management Guidebook* is part of the EPIC industrial energy management program aimed at helping industry and commerce adjust to the increased cost and shortage of energy.

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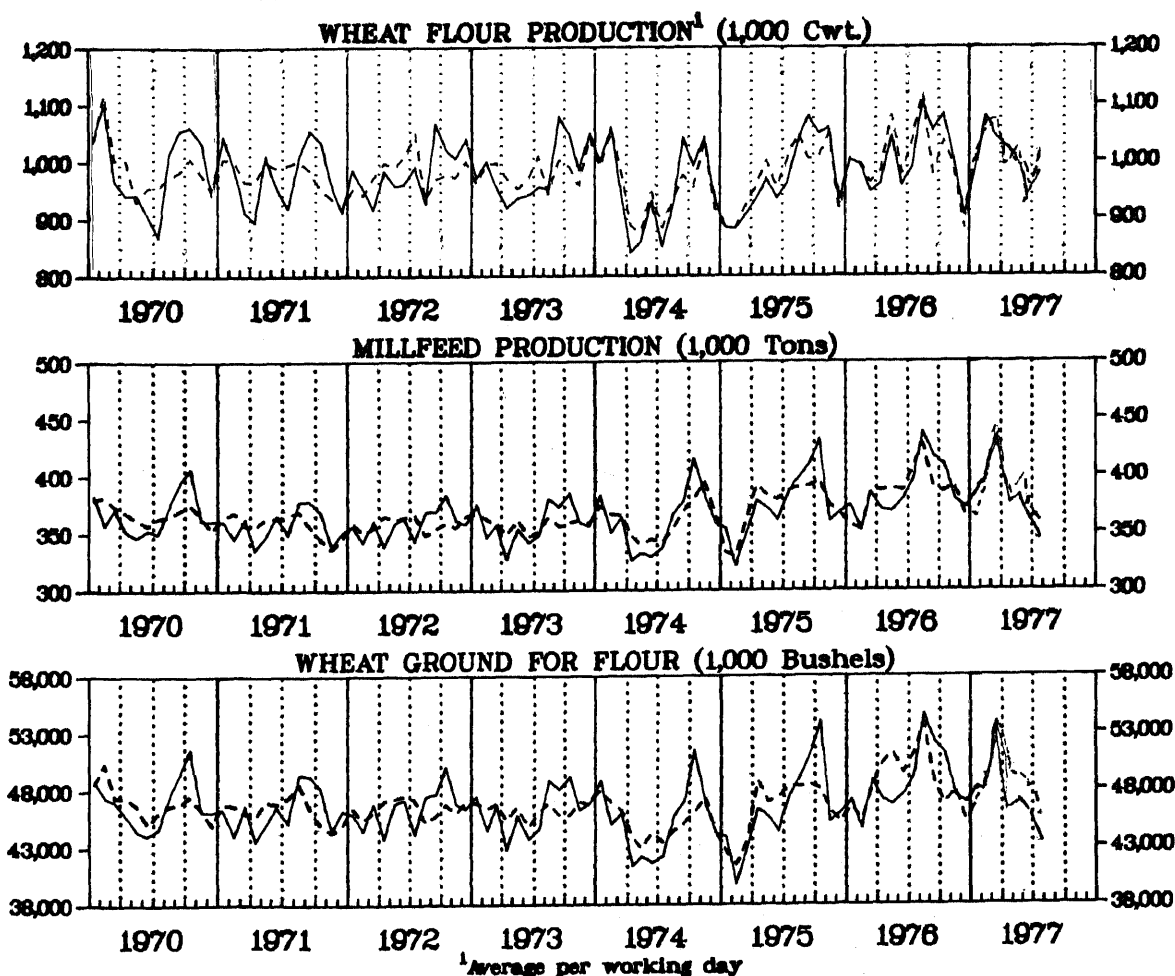
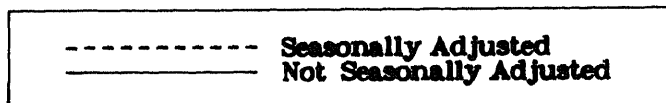
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TABLE 3.--WHEAT GROUND FOR FLOUR AND WHEAT FLOUR PRODUCTION BY DIVISIONS AND STATES

GEOGRAPHIC AREA	AUGUST 1977		JULY 1977		AUGUST 1976	
	WHEAT GROUND FOR FLOUR (1,000 BUSHELS)	WHEAT FLOUR PRODUCTION (1,000 CWT.)	WHEAT GROUND FOR FLOUR (1,000 BUSHELS)	WHEAT FLOUR PRODUCTION (1,000 CWT.)	WHEAT GROUND FOR FLOUR (1,000 BUSHELS)	WHEAT FLOUR PRODUCTION (1,000 CWT.)
UNITED STATES, TOTAL	51,878	23,099	43,518	19,393	54,634	24,257
MIDDLE ATLANTIC	6,797	3,041	5,628	2,525	6,565	2,918
NEW YORK	5,723	2,573	4,775	2,153	5,462	2,443
NORTH CENTRAL	28,518	12,696	24,016	10,705	31,460	13,888
OHIO	3,121	1,354	2,537	1,085	3,383	1,463
INDIANA	1,159	497	1,201	510	1,420	605
ILLINOIS	3,366	1,475	2,666	1,158	3,277	1,421
MICHIGAN	787	344	692	303	804	350
MINNESOTA	6,382	2,923	5,466	2,516	6,656	3,010
IOWA	(D)	(D)	(D)	(D)	(D)	(D)
MISSOURI	4,332	1,928	3,976	1,757	4,881	2,169
NEBRASKA	1,554	683	1,073	469	1,922	814
KANSAS	5,964	2,680	4,951	2,259	7,094	3,166
SOUTH ATLANTIC	2,986	1,278	2,372	1,011	2,891	1,280
EAST SOUTH CENTRAL	2,811	1,207	2,417	1,040	2,713	1,164
TENNESSEE	2,164	928	1,846	802	2,094	899
WEST SOUTH CENTRAL	3,201	1,443	2,693	1,214	3,513	1,554
OKLAHOMA	1,350	617	1,285	585	1,692	770
TEXAS	1,628	726	1,274	569	1,590	681
MOUNTAIN	3,017	1,354	2,628	1,177	3,025	1,393
MONTANA	763	359	581	274	821	372
UTAH	(D)	(D)	(D)	(D)	(D)	(D)
PACIFIC	4,548	2,080	3,764	1,721	4,467	2,060
WASHINGTON	1,394	627	1,133	511	1,331	600
OREGON	791	354	662	295	870	393
CALIFORNIA AND HAWAII	2,363	1,099	1,969	915	2,266	1,067

(D) Withheld to avoid disclosure of figures for individual companies.

TABLE 4.--EXPORTS OF WHEAT AND WHEAT FLOUR

Country to which exported	July 1977	June 1977	7 months through July 1977
WHEAT FLOUR, EXCEPT MEAL AND GROATS, DONATED FOR RELIEF OR CHARITY (0460110) (1,000 cwt.)			
Total.....	350	356	1,949
Egypt.....	-	-	236
Guatemala.....	5	-	83
Colombia.....	-	-	44
Ecuador.....	-	-	3
Brazil.....	-	-	5
Israel.....	-	-	47
India.....	-	12	29
Chile.....	22	35	145
Sri Lanka (Ceylon).....	-	24	73
Philippine Republic.....	29	21	155
Morocco.....	44	37	320
Other.....	250	227	809
WHEAT FLOUR, WHOLLY U.S. WHEAT, EXCEPT DURUM FLOUR AND SEMOLINA (0460120) (1,000 cwt.)			
Total.....	1,189	1,241	13,578
Nicaragua.....	4	3	19
Jamaica.....	36	15	171
Brazil.....	-	-	-
Iceland.....	5	15	52
Jordan.....	-	-	110
Saudi Arabia.....	252	559	2,798
Sri Lanka (Ceylon).....	760	452	3,548
Egypt.....	-	58	5,702
Philippine Republic.....	1	-	13
Korean Republic.....	-	-	-
Morocco.....	-	-	-
Other.....	131	139	1,165
WHEAT, INCLUDING SPELT OR MESLIN, UNMILLED, NOT DONATED FOR RELIEF OR CHARITY (0410020) (1,000 bu.)			
Total.....	82,838	75,606	450,359
USSR.....	11,235	11,139	74,953
Venezuela.....	3,056	2,704	12,958
Peru.....	3,779	1,889	13,428
Brazil.....	4,220	3,225	11,459
Portugal.....	1,440	1,736	11,993
Iran.....	1,940	1,966	30,573
Indonesia.....	1,398	882	9,699
Korean Republic.....	5,434	5,812	39,086
China (Taiwan).....	-	-	9,932
Japan.....	10,127	9,258	71,891
Egypt.....	6,855	5,883	33,772
Nigeria.....	2,429	2,075	14,589
Other.....	30,925	29,037	116,026

Note: Data in this table are taken from Foreign Trade publication FT 410, U.S. Exports. The Schedule B codes are as follows: 0460110, wheat flour (except meal and groats); 0460120, wheat flour (wholly of U.S. wheat, except durum flour and semolina); 0410020, wheat, including spelt or meslin, unmilled, not donated for relief or charity.

- Represents zero.

DESCRIPTION OF SURVEY

Scope of Survey—This survey includes firms engaged in the production of wheat and rye flour. The reporting panel consists of mills with a daily capacity of over 400 sacks of flour.

Sampling Description—The data shown in this publication were collected on Bureau of the Census monthly Form M-20A, Flour Milling Products. The aggregates published in this report have been compiled from a sample of approximately 250 respondents accounting for 98 percent of the total U.S. production of flour mill products. The universe for this sample was the 1958 Census of Manufactures. Approximately 200 small establishments are in the nonmail universe. Their production data are estimated based upon their 1958 Census of Manufactures report. The monthly reporting panel was selected by arraying the reporting units in descending order by size for each product line, then choosing a sufficient number of respondents (beginning with the largest) to yield a coverage of approximately 98 percent for each product line.

Survey Error—The current month's figures include estimates for respondents in the reporting panel whose reports were not received in time for tabulation, as well as for 200 small respondents excluded from the mail panel. Missing figures for companies in the reporting panel are imputed from the month-to-month movements shown by reporting firms. The overall imputation rate is generally limited to 12 percent, including about 2 percent for small respondents excluded from the monthly reporting panel. Individual items with a higher than 12-percent imputation rate are footnoted.

The imputation rate is not an explicit indicator of the potential error in published figures due to nonresponse, both because the actual monthly movements for nonrespondents may or may not closely agree with the imputed movements, and because the estimates for nonpanel cases may or may not reflect their current activity. The probable difference between the actual and imputed figures is unknown. The degree of uncertainty regarding the accuracy of the data, however, increases as the percentage of imputation increases. Figures with imputation rates above 12 percent, particularly, should be used with caution.

Revision to Previous Period Data—Statistics for previous months may be revised due to receipt of corrected data from respondents, including late reports for which estimates were made, and other corrections. Figures which have been revised by more than 5 percent from previously published figures are indicated by footnotes.

Reporting Period Adjustment—Beginning January 1975, the data were adjusted for the number of working days in the reporting period to compensate for differences in individual company reporting patterns, i.e., calendar month, 4-week, 5-week periods.

Seasonal Adjustment—This report presents seasonally adjusted data in table 1A for selected series shown in table 1B. The data were seasonally adjusted using the X-11 variant of the Bureau of the Census method II seasonal adjustment program. This seasonal adjustment program is a ratio-to-moving average method. The seasonal adjustment program largely eliminates the effect of seasonal variations (intra-year variations repeated constantly from year to year) within the series. The seasonally adjusted data usually provide a better measure than the not seasonally adjusted (original) data of the month-to-month variations which are due to factors other than seasonal pattern.

EXPLANATION OF TERMS

Units of Quantity—Grain ground is measured in bushels of 60 pounds for wheat, 56 pounds for rye. Flour production is measured in sacks of 100 pounds.

Capacity—Based on replies to the question "What is the maximum quantity of flour that can be produced in your mill in one day if operated for 24 hours?" The capacity of idle mills is included until the mills are reported to be destroyed, dismantled, or abandoned.

Grain—Represents the purchased weight of grain ground, including the weight of foreign material (dockage).

Millfeed—Includes bran, middlings, shorts, and other milling byproducts intended principally for use as feed materials.

Wheat Flour—Includes whole wheat flour, farina, industrial flour, and durum flour.

Stocks of Flour (quarterly)—Represents mill stocks in all positions, sold and unsold.

RELATED REPORTS

An annual current industrial report is published in this series. The annual report summarizes monthly figures and incorporates all known revisions in the series for both current and previous year, thus providing a single reference copy to replace the monthly publications. This annual summary provides additional information on the history of this survey.

The Bureau of the census also publishes reports on other related products as follows:

Series	Frequency	Title
<i>Current Industrial Reports</i>		
M3-1	Monthly	Manufacturers' Shipments, Inventories, and Orders
M20C	Monthly	Confectionery, Including Chocolate Products

Foreign Trade Reports

FT-410	Monthly	U.S. Exports—Schedule B—Commodity by Country
FT-135	Monthly	U.S. General Imports—Schedule A—Commodity by Country

CONTACTS FOR DATA USERS

Subject Area	Contact	Phone Number
Current Industrial Report M20A	Thomas Flood	(301) 763-2415
Foreign Trade publications	Paul Finn	(301) 763-5140
Bureau of Domestic Commerce	J.D. Morrissey	(202) 377-4793
To order a Census publication	Daisy Williams	(301) 763-7472
To order microfilm of Census publications	Theresa Allen	(301) 763-5042

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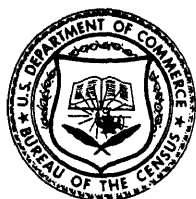
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Flour Milling Products

SEPTEMBER 1977



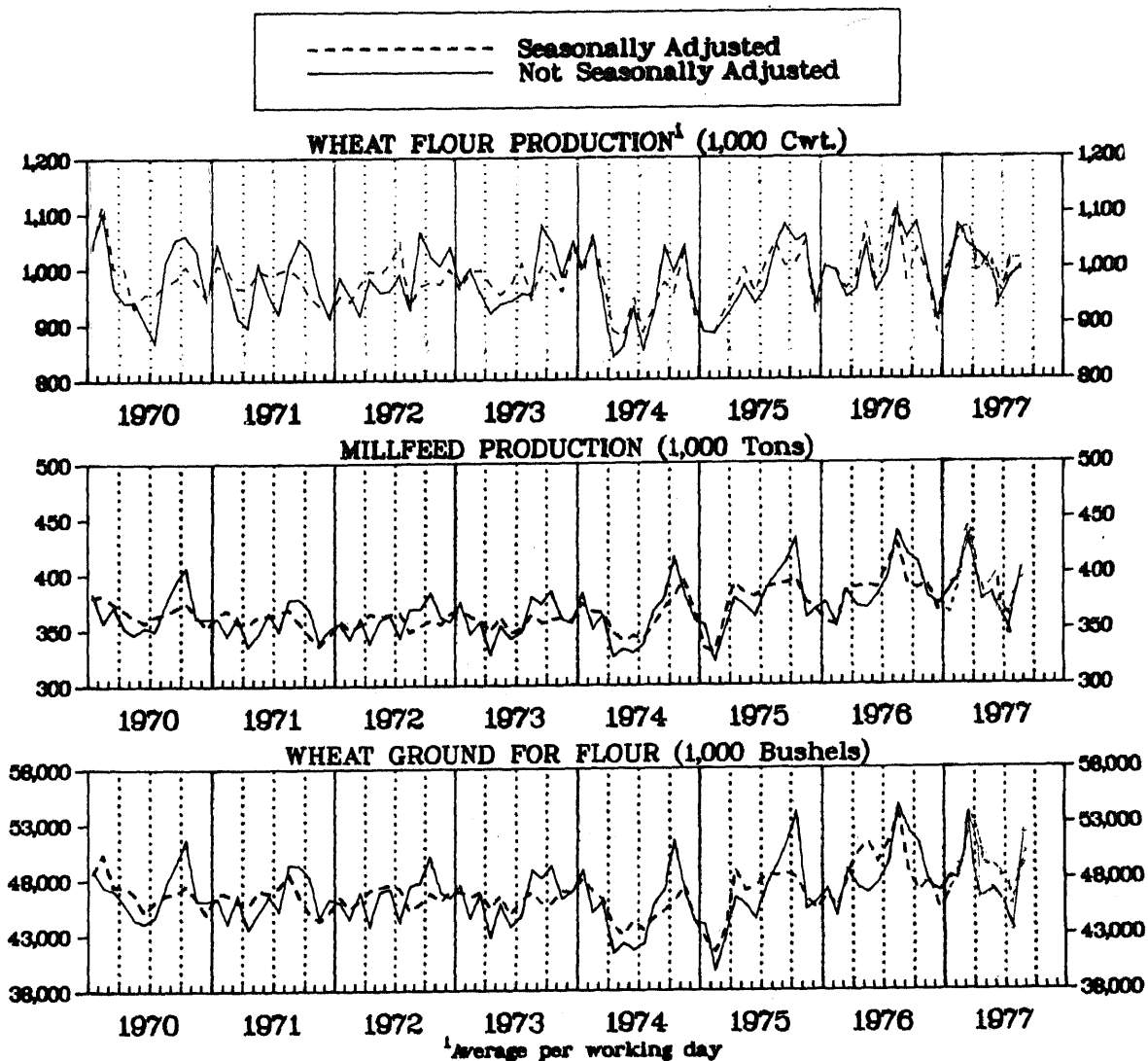
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M20A(77)-9
Issued October 1977

The statistics in this publication are based on a survey of manufacturers and represent total U.S. production of flour milling products. Estimates are included for companies whose reports were not received in time for tabulation. A more com-

plete description of this survey appears on page 5. An annual current industrial report is published in this series and includes all the months for the current and previous years and incorporates all known revisions in the series.

WHEAT FLOUR MILLING: 1970 TO 1977



Address inquiries concerning these figures to U.S. Department of Commerce, Bureau of the Census, Industry Division, Washington, D.C. 20233, or call Thomas Flood, (301) 763-2415.

For sale by the Subscriber Services Section (Publications), Bureau of the Census, Washington, D.C. 20233, or any U.S. Department of Commerce district office. Postage stamps not acceptable; currency submitted at sender's risk. Remittances from foreign countries must be by international money order or by a draft on a U.S. bank. Price 25 cents per copy, \$3.30 per year.

Table 1A.--SUMMARY OF WHEAT FLOUR MILLING: 1975 TO 1977

(Seasonally adjusted)			
Month and year	Wheat flour production average per working day ¹ (1,000 cwt.)	Millfeed production (1,000 tons)	Wheat flour for flour (1,000 bushels)
1977			
September.....	925	355	45,607
August.....	1,015	400	50,998
July.....	1,015	355	45,237
June.....	953	374	48,038
May.....	1,027	398	49,079
April.....	1,005	387	49,469
March.....	1,075	433	53,789
February.....	1,072	387	48,754
January.....	1,017	363	47,465
1976			
December.....	885	370	45,697
November.....	990	391	48,063
October.....	1,035	386	46,773
September.....	977	389	48,536
August.....	1,119	427	53,879
July.....	1,035	407	51,218
June.....	978	387	49,476
May.....	1,080	389	51,287
April.....	983	387	50,311
March.....	963	387	48,266
February.....	996	353	45,354
January.....	1,004	356	46,644
1975			
December.....	915	367	45,198
November.....	1,049	375	46,207
October.....	1,006	396	48,112
September.....	1,005	391	48,506

Note: Data include from 2- to 5-percent estimation for nonresponse. The data for 1974 and 1975 have been revised based on the new seasonal factors as shown in the April 1976 publication.

¹Revised by 5 percent or more from previously published figures.

²The number of working days per month is computed on the basis of a 5-day week with allowances for the following holidays: January 1, Memorial Day, Independence Day, Thanksgiving Day, and December 25.

Table 1B.--SUMMARY OF WHEAT FLOUR MILLING: 1975 TO 1977

(Not seasonally adjusted)								
Month and year	Wheat flour production (1,000 cwt.)		Millfeed production (tons)	Wheat ground for flour (1,000 bushels)	Wheat flour mill stocks ² (1,000 cwt.)	Daily 24-hour capacity in wheat flour ² (1,000 cwt.)	Wheat flour produced as percent of capacity	Flour extraction rate ³ (percent)
	Average per working day ¹	Calendar month total						
1977								
September.....	997	21,943	379,841	49,073	3,537	968	103.0	74.5
August.....	1,001	23,023	410,232	51,712	(NA)	957	104.6	74.2
July.....	970	19,393	344,584	43,518	(NA)	957	101.3	74.3
June.....	933	20,529	366,513	46,261	4,167	957	97.5	74.0
May.....	993	20,861	375,128	46,870	(NA)	976	101.8	74.2
April.....	982	20,632	369,798	46,402	(NA)	976	100.7	74.1
March.....	1,057	24,321	430,120	54,434	4,248	976	108.3	74.5
February.....	1,071	21,425	385,212	48,023	(NA)	990	108.2	74.4
January.....	1,015	21,320	380,273	48,035	(NA)	990	102.5	74.0
1976								
December.....	905	20,804	372,844	46,931	4,334	990	91.4	73.9
November.....	1,001	21,031	379,784	47,486	(NA)	998	100.3	73.8
October.....	1,082	22,723	410,072	51,216	(NA)	998	108.4	73.9
September.....	1,053	23,178	417,142	52,225	3,621	998	105.5	73.4
August.....	1,103	24,257	437,548	54,634	(NA)	990	111.4	74.0
July.....	989	21,751	395,596	49,272	(NA)	990	100.1	73.6
June.....	957	21,059	378,582	47,645	3,923	990	96.7	73.7
May.....	1,044	20,871	369,318	46,758	(NA)	997	104.7	74.4
April.....	960	21,113	369,972	47,192	(NA)	997	96.3	74.5
March.....	947	21,771	384,578	48,845	4,510	997	94.9	74.3
February.....	995	19,891	351,557	44,674	(NA)	991	100.4	74.2
January.....	1,002	21,034	373,719	47,204	(NA)	991	101.1	74.3
1975								
December.....	933	20,532	368,047	46,000	3,907	991	94.1	74.4
November.....	1,059	20,113	359,798	45,241	(NA)	995	106.9	74.0
October.....	1,049	24,129	432,009	54,067	(NA)	995	105.4	74.4
September.....	1,080	22,681	409,197	51,162	4,140	995	108.5	74.0

Note: Data include estimates for small mills.

(NA) Not available.

¹The number of working days per month is computed on the basis of a 5-day week with allowances for the following holidays: January 1, Memorial Day, Independence Day, Thanksgiving Day, and December 25.

²Collected quarterly

³Wheat flour production as compared with amount of wheat ground.

TABLE 2.--DURUM WHEAT AND RYE: FLOUR PRODUCTION, GRAIN CONSUMPTION,
MILL STOCKS AND CAPACITY

PRODUCT CODE	DESCRIPTION OF ITEM	UNIT OF MEASURE	SEPTEMBER 1977 QUANTITY	AUGUST 1977 QUANTITY	SEPTEMBER 1976 QUANTITY
	DURUM WHEAT (INCLUDED IN TABLE 1 DATA):				
0011173	DURUM WHEAT GROUND.	M BU	3,406	3,347	3,293
2041153	STRAIGHT SEMOLINA DURUM FLOUR.	M CWT	1,453	1,442	1,497
2041155	BLENDED SEMOLINA DURUM FLOUR.	DO	(D)	(D)	(D)
	RYE:				
0011951	RYE GROUND FOR FLOUR.	M BU	313	328	298
2041611	RYE FLOUR PRODUCTION.	M CWT	143	151	135
2041618	RYE MILLFEED PRODUCTION.	TONS	1,650	1,688	1,722
2041611	RYE FLOUR STOCKS (1).	M CWT	21	(NA)	23
	24 HOUR CAPACITY (1).	DO	10	(NA)	9

Note: Data include estimates for small mills. Detail may not add to total due to independent rounding. These data exclude all flour blended by macaroni and spaghetti manufacturers, etc., as such activities are not within the scope of this survey. Only mills engaged in milling flour or meal are included in this survey.

(D) Withheld to avoid disclosure of figures for individual companies.

(NA) Not available.

¹Collected quarterly.

TABLE 3.--WHEAT GROUND FOR FLOUR AND WHEAT FLOUR PRODUCTION BY DIVISIONS AND STATES

GEOGRAPHIC AREA	SEPTEMBER 1977		AUGUST 1977		SEPTEMBER 1976	
	QUANTITY WHEAT GROUND FOR FLOUR (1,000 BUSHELS)	QUANTITY WHEAT FLOUR PRODUC- TION (1,000 CWT.)	QUANTITY WHEAT GROUND FOR FLOUR (1,000 BUSHELS)	QUANTITY WHEAT FLOUR PRODUC- TION (1,000 CWT.)	QUANTITY WHEAT GROUND FOR FLOUR (1,000 BUSHELS)	QUANTITY WHEAT FLOUR PRODUC- TION (1,000 CWT.)
UNITED STATES, TOTAL.	49,073	21,943	51,712	23,023	52,225	23,178
MIDDLE ATLANTIC.	6,855	3,079	6,869	3,067	6,572	2,933
NEW YORK.	5,829	2,635	5,722	2,572	5,499	2,465
NORTH CENTRAL.	26,638	11,919	28,230	12,563	29,982	13,270
OHIO.	2,823	1,234	3,121	1,354	3,412	1,476
INDIANA.	1,320	584	1,159	497	1,200	510
ILLINOIS.	3,194	1,415	3,460	1,522	3,114	1,348
MICHIGAN.	828	365	781	342	847	371
MINNESOTA.	6,066	2,771	6,382	2,923	6,298	2,884
IOWA.	(D)	(D)	(D)	(D)	(D)	(D)
MISSOURI.	4,016	1,800	^r 4,332	1,928	4,845	2,145
NEBRASKA.	(D)	(D)	^r 1,389	^r 610	1,706	701
KANSAS.	5,534	2,490	5,753	2,575	6,643	2,983
SOUTH ATLANTIC.	2,717	1,166	2,986	1,278	2,668	1,184
EAST SOUTH CENTRAL.	2,731	1,184	2,811	1,207	2,615	1,118
TENNESSEE.	2,131	926	2,164	928	1,995	854
WEST SOUTH CENTRAL.	2,893	1,298	3,175	1,433	3,186	1,406
OKLAHOMA.	1,228	560	1,350	617	1,475	670
TEXAS.	1,437	635	1,602	716	1,444	618
MOUNTAIN.	2,968	1,337	3,017	1,354	2,923	1,313
MONTANA.	770	363	763	359	720	324
UTAH.	(D)	(D)	(D)	(D)	(D)	(D)
PACIFIC.	4,271	1,960	4,624	2,121	4,279	1,954
WASHINGTON.	1,282	579	1,394	627	1,393	620
OREGON.	784	357	^r 867	^r 395	756	336
CALIFORNIA AND HAWAII.	2,205	1,024	2,363	1,099	2,130	998

Note: Detail may not add to total due to independent rounding.

(D) Withheld to avoid disclosure of figures for individual companies.

^rRevised by 5 percent or more from previously published figures.

Table 4.--EXPORTS OF WHEAT AND WHEAT FLOUR

Country to which exported	August 1977	July 1977	8 months through August 1977
WHEAT FLOUR, EXCEPT MEAL AND GROATS, DONATED FOR RELIEF OR CHARITY (0460110) (1,000 cwt.)			
Total.....	338	350	2,286
Egypt.....	159	-	395
Guatemala.....	1	5	85
Colombia.....	15	-	58
Ecuador.....	2	-	6
Brazil.....	-	-	5
Israel.....	16	-	63
India.....	-	-	29
Chile.....	10	22	156
Sri Lanka (Ceylon).....	-	-	73
Philippine Republic.....	15	29	170
Morocco.....	86	44	406
Other.....	34	250	840
WHEAT FLOUR, WHOLLY U.S. WHEAT, EXCEPT DURUM FLOUR AND SEMOLINA (0460120) (1,000 cwt.)			
Total.....	1,138	1,189	14,716
Nicaragua.....	4	4	23
Jamaica.....	32	36	202
Brazil.....	-	-	-
Iceland.....	3	5	55
Jordan.....	-	-	110
Saudi Arabia.....	317	252	3,115
Sri Lanka (Ceylon).....	650	760	4,198
Egypt.....	-	-	5,702
Philippine Republic.....	1	1	13
Korean Republic.....	-	-	-
Morocco.....	-	-	-
Other.....	131	131	1,298
WHEAT, INCLUDING SPELT OR MESLIN, UNMILLED, NOT DONATED FOR RELIEF OR CHARITY (0410020) (1,000 bu.)			
Total.....	93,432	82,838	543,791
U.S.S.R.....	3,841	11,235	78,794
Venezuela.....	2,145	3,056	15,103
Peru.....	957	3,779	14,385
Brazil.....	3,533	4,220	14,993
Portugal.....	2,489	1,440	14,482
Iran.....	2,575	1,940	33,149
Indonesia.....	921	1,398	10,621
Korean Republic.....	4,838	5,434	43,924
China (Taiwan).....	1,984	-	11,916
Japan.....	11,918	10,127	83,808
Egypt.....	3,770	6,855	37,541
Nigeria.....	2,072	2,429	16,661
Other.....	52,389	30,925	168,414

Note: Data in this table are taken from Foreign Trade publication FT410, U.S. Exports. The Schedule B codes are as follows: 0460110, wheat flour (except meal and groats); 0460120, wheat flour (wholly of U.S. wheat, except durum flour and semolina); 0410020, wheat, including spelt or meslin, unmilled, not donated for relief or charity.

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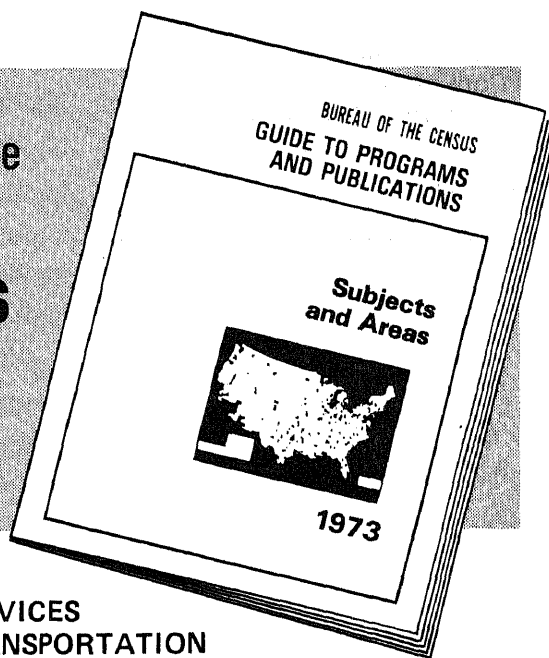
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Flour Milling Products

NOVEMBER 1977



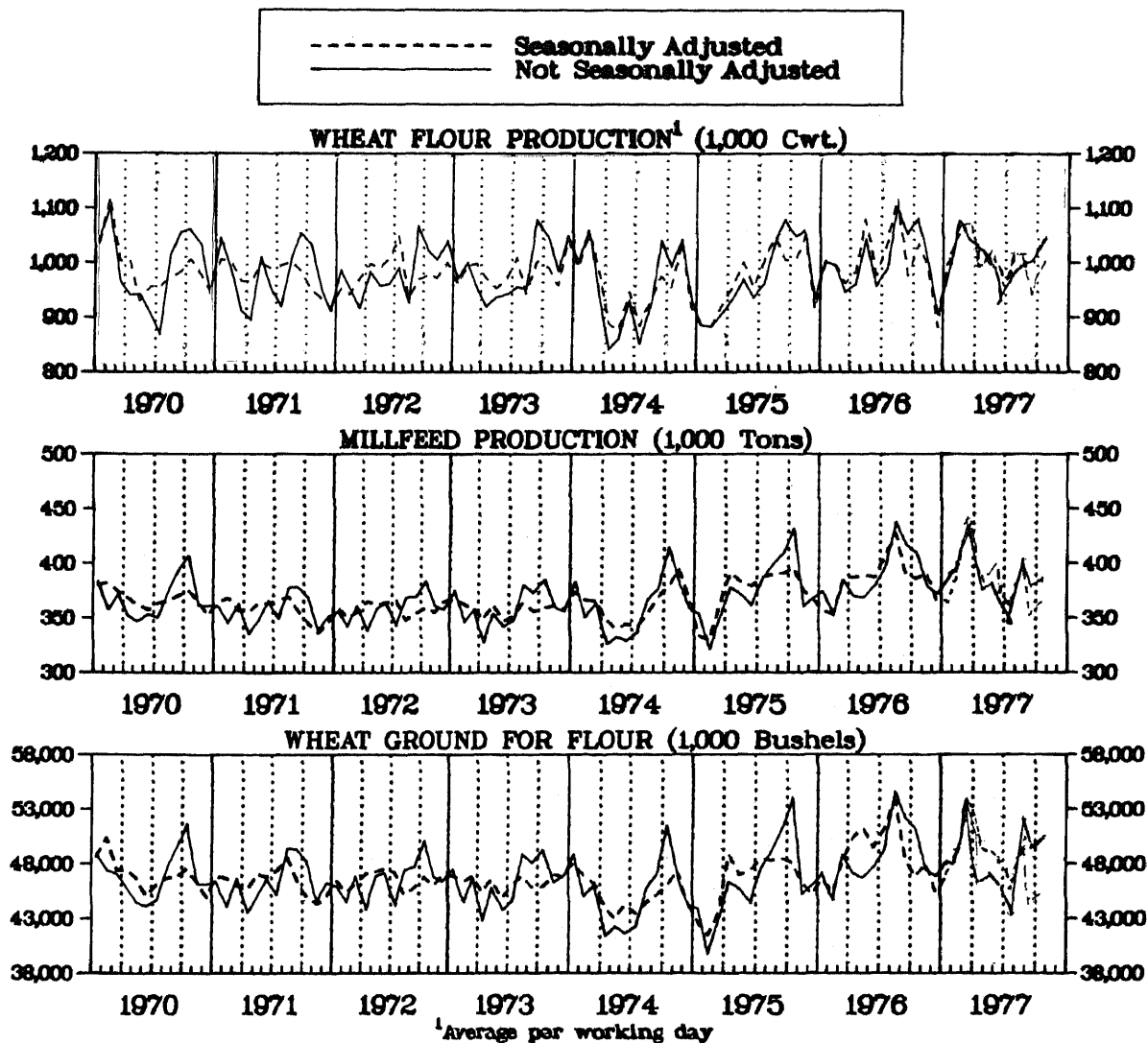
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BUREAU OF THE CENSUS

M20A(77)-11
Issued December 1977

The statistics in this publication are based on a survey of manufacturers and represent total U.S. production of flour milling products. Estimates are included for companies whose reports were not received in time for tabulation. A more com-

plete description of this survey appears on page 5. An annual current industrial report is published in this series. The annual report includes all the months for the current and previous years and incorporates all known revisions in the series.

WHEAT FLOUR MILLING: 1970 TO 1977



Address inquiries concerning these figures to U.S. Department of Commerce, Bureau of the Census, Industry Division, Washington, D.C. 20233, or call Thomas Flood, (301) 763-2415.

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Table 1A.--SUMMARY OF WHEAT FLOUR MILLING: 1975 TO 1977

(Seasonally adjusted)			
Month and year	Wheat flour production average per working day ¹ (1,000 cwt.)	Millfeed production (1,000 tons)	Wheat flour for flour (1,000 bushels)
1977			
November.....	1,056	401	50,725
October.....	1,005	360	45,078
September.....	929	353	44,779
August.....	1,015	400	50,998
July.....	1,015	355	45,237
June.....	953	374	48,038
May.....	1,027	398	49,079
April.....	1,005	387	49,469
March.....	1,075	433	53,789
February.....	1,072	387	48,754
January.....	1,017	363	47,465
1976			
December.....	885	370	45,697
November.....	990	391	48,063
October.....	1,035	386	46,773
September.....	977	389	48,536
August.....	1,119	427	53,879
July.....	1,035	407	51,218
June.....	978	387	49,476
May.....	1,080	389	51,287
April.....	983	387	50,311
March.....	963	387	48,266
February.....	996	353	45,354
January.....	1,004	356	46,644
1975			
December.....	915	367	45,198
November.....	1,049	375	46,207
October.....	1,006	396	48,112

See footnotes at end of table 1B.

Table 1B.--SUMMARY OF WHEAT FLOUR MILLING: 1975 TO 1977

(Not seasonally adjusted)								
Month and year	Wheat flour production (1,000 cwt.)		Millfeed production (tons)	Wheat ground for flour (1,000 bushels)	Wheat flour mill stocks ² (1,000 cwt.)	Daily 24-hour capacity in wheat flour ² (1,000 cwt.)	Wheat flour produced as percent of capacity	Flour extraction rate ³ (percent)
	Average per working day ¹	Calendar month total						
1977								
November.....	1,068	22,419	389,358	50,116	(NA)	968	110.3	74.6
October.....	1,050	22,054	382,730	49,360	(NA)	968	108.5	74.5
September.....	1,002	22,039	378,118	49,258	3,537	968	103.4	74.6
August.....	1,001	23,023	410,232	51,712	(NA)	957	104.6	74.2
July.....	970	19,393	344,584	43,518	(NA)	957	101.3	74.3
June.....	933	20,529	366,513	46,261	4,167	957	97.5	74.0
May.....	993	20,861	375,128	46,870	(NA)	976	101.8	74.2
April.....	982	20,632	369,798	46,402	(NA)	976	100.7	74.1
March.....	1,057	24,321	430,120	54,434	4,248	976	108.3	74.5
February.....	1,071	21,425	385,212	48,023	(NA)	990	108.2	74.4
January.....	1,015	21,320	380,273	48,035	(NA)	990	102.5	74.0
1976								
December.....	905	20,804	372,844	46,931	4,334	990	91.4	73.9
November.....	1,001	21,031	379,784	47,486	(NA)	998	100.3	73.8
October.....	1,082	22,723	410,072	51,216	(NA)	998	108.4	73.9
September.....	1,053	23,178	417,142	52,225	3,621	998	105.5	73.4
August.....	1,103	24,257	437,548	54,634	(NA)	990	111.4	74.0
July.....	989	21,751	395,596	49,272	(NA)	990	100.1	73.6
June.....	957	21,059	378,582	47,645	3,923	990	96.7	73.7
May.....	1,044	20,871	369,318	46,758	(NA)	997	104.7	74.4
April.....	960	21,113	369,972	47,192	(NA)	997	96.3	74.5
March.....	947	21,771	384,578	48,845	4,510	997	94.9	74.3
February.....	995	19,891	351,557	44,674	(NA)	991	100.4	74.2
January.....	1,002	21,034	373,719	47,204	(NA)	991	101.1	74.3
1975								
December.....	933	20,532	368,047	46,000	3,907	991	94.1	74.4
November.....	1,059	20,113	359,798	45,241	(NA)	995	106.9	74.0
October.....	1,049	24,129	432,009	54,067	(NA)	995	105.4	74.4

Note: Data include estimate for small mills. The data shown for 1976 and 1977 exclude a number of plants that began operations during this period. These companies account for approximately 5-8 percent of our 1977 estimates. Revised monthly data will be shown in the annual summary to be released in early 1978. Data for January 1978 will include the production for these companies.

(NA) Not available.

¹The number of working days per month is computed on the basis of a 5-day week with allowances for the following holidays: January 1, Memorial Day, Independence Day, Thanksgiving Day, and December 25.

²Collected quarterly.

³Wheat flour production as compared with amount of wheat ground.

TABLE 2.--DURUM WHEAT AND RYE: FLOUR PRODUCTION, GRAIN CONSUMPTION,
MILL STOCKS AND CAPACITY

PRODUCT CODE	DESCRIPTION OF ITEM	UNIT OF MEASURE	NOVEMBER 1977	OCTOBER 1977	NOVEMBER 1976
	DURUM WHEAT (INCLUDED IN TABLE 1 DATA):				
0011173	DURUM WHEAT GROUND.	M BU	3,174	3,314	3,034
2041153	STRAIGHT SEMOLINA DURUM FLOUR.	M CWT	1,349	1,431	1,363
2041155	BLENDED SEMOLINA DURUM FLOUR.	DO	(D)	(D)	(D)
	RYE:				
0011951	RYE GROUND FOR FLOUR.	M BU	332	313	325
2041611	RYE FLOUR PRODUCTION.	M CWT	149	136	143
2041618	RYE MILLFEED PRODUCTION.	TONS	1,894	1,754	1,772
2041611	RYE FLOUR STOCKS (1).	M CWT	(NA)	(NA)	(NA)
	24 HOUR CAPACITY (1).	DO	10	10	10

Note: Data include estimates for small mills. Detail may not add to total due to independent rounding. These data exclude all flour blended by macaroni and spaghetti manufacturers, etc., as such activities are not within the scope of this survey. Only mills engaged in milling flour or meal are included in this survey.

(D) Withheld to avoid disclosure of figures for individual companies.

(NA) Not available.

¹Collected quarterly.

TABLE 3.--QUANTITY OF WHEAT GROUND FOR FLOUR AND WHEAT FLOUR PRODUCTION, BY DIVISIONS AND STATES
(WHEAT GROUND FOR FLOUR IN THOUSANDS OF BUSHEL; WHEAT FLOUR PRODUCTION IN THOUSANDS
OF HUNDRED WEIGHTS)

GEOGRAPHIC AREA	NOVEMBER 1977		OCTOBER 1977		NOVEMBER 1976	
	WHEAT GROUND FOR FLOUR	WHEAT FLOUR PRODUCTION	WHEAT GROUND FOR FLOUR	WHEAT FLOUR PRODUCTION	WHEAT GROUND FOR FLOUR	WHEAT FLOUR PRODUCTION
UNITED STATES, TOTAL.	50,116	22,419	49,360	22,054	47,486	21,031
MIDDLE ATLANTIC.	6,737	3,003	6,603	2,954	6,202	2,788
NEW YORK.	5,582	2,499	5,475	2,461	4,976	2,253
NORTH CENTRAL.	27,477	12,287	27,802	12,435	26,525	11,705
OHIO.	2,985	1,303	3,155	1,381	3,182	1,369
INDIANA.	1,225	530	1,387	599	1,228	518
ILLINOIS.	3,084	1,366	3,254	1,435	2,875	1,260
MICHIGAN.	884	387	895	398	902	350
MINNESOTA.	5,930	2,703	6,147	2,820	5,718	2,604
IOWA.	(D)	(D)	(D)	(D)	(D)	(D)
MISSOURI.	4,989	2,233	4,431	1,978	4,241	1,889
NEBRASKA.	(D)	(D)	(D)	(D)	1,603	683
KANSAS.	5,445	2,462	5,672	2,557	5,049	2,265
SOUTH ATLANTIC.	2,833	1,218	2,491	1,056	2,708	1,196
EAST SOUTH CENTRAL.	2,661	1,153	2,623	1,137	2,500	1,078
TENNESSEE.	2,147	931	2,068	898	1,937	840
WEST SOUTH CENTRAL.	3,053	1,384	2,912	1,308	2,808	1,238
OKLAHOMA.	1,367	630	1,198	550	1,127	511
TEXAS.	1,429	637	1,464	647	1,426	610
MOUNTAIN.	3,044	1,381	2,805	1,267	2,673	1,180
MONTANA.	772	367	673	319	676	306
UTAH.	(D)	(D)	(D)	(D)	(D)	(D)
PACIFIC.	4,311	1,993	4,124	1,897	4,070	1,846
WASHINGTON.	1,321	597	1,261	570	1,206	534
OREGON.	722	329	707	319	740	331
CALIFORNIA AND HAWAII.	2,290	1,067	2,156	1,008	2,124	981

Note: Detail may not add to total due to independent rounding.

(D) Withheld to avoid disclosure of figures for individual companies.

Table 4.--EXPORTS OF WHEAT AND WHEAT FLOUR

Country to which exported	October 1977	September 1977	10 months through October 1977
WHEAT FLOUR, EXCEPT MEAL AND GROATS, DONATED FOR RELIEF OR CHARITY (0460110) (1,000 cwt.)			
Total.....	373	534	3,193
Egypt.....	46	339	779
Guatemala.....	-	-	85
Colombia.....	9	26	93
Ecuador.....	-	-	6
Brazil.....	-	-	5
Israel.....	42	-	105
India.....	13	11	53
Chile.....	3	6	164
Sri Lanka (Ceylon).....	40	-	112
Philippine Republic.....	-	-	170
Morocco.....	74	80	560
Other.....	146	72	1,061
WHEAT FLOUR, WHOLLY U.S. WHEAT, EXCEPT DURUM FLOUR AND SEMOLINA (0460120) (1,000 cwt.)			
Total.....	467	722	15,905
Nicaragua.....	-	2	25
Jamaica.....	-	18	220
Brazil.....	-	22	22
Iceland.....	1	9	65
Jordan.....	-	-	110
Saudi Arabia.....	216	564	3,894
Sri Lanka (Ceylon).....	148	27	4,373
Egypt.....	-	-	5,702
Philippine Republic.....	-	-	13
Korean Republic.....	-	-	-
Morocco.....	-	-	-
Other.....	102	80	1,481
WHEAT, INCLUDING SPELT OR MESLIN, UNMILLED, NOT DONATED FOR RELIEF OR CHARITY (0410020) (1,000 bu.)			
Total.....	68,258	108,512	720,561
U.S.S.R.....	2,812	4,470	86,077
Venezuela.....	2,205	2,722	20,031
Peru.....	63	973	15,421
Brazil.....	965	-	15,957
Portugal.....	1,817	3,277	19,576
Iran.....	1,109	3,197	41,443
Indonesia.....	-	7,185	13,817
Korean Republic.....	2,957	9,840	56,721
China (Taiwan).....	992	1,937	14,845
Japan.....	9,900	12,712	106,421
Egypt.....	3,624	2,892	44,057
Nigeria.....	1,496	2,726	20,883
Other.....	40,318	56,581	265,312

Note: Data in this table are taken from Foreign Trade publication FT410, U.S. Exports. The Schedule B codes are as follows: 0460110, wheat flour (except meal and groats); 0460120, wheat flour (wholly of U.S. wheat, except durum flour and semolina); 0410020, wheat, including spelt or meslin, unmilled, not donated for relief or charity.

- Represents zero.

DESCRIPTION OF SURVEY

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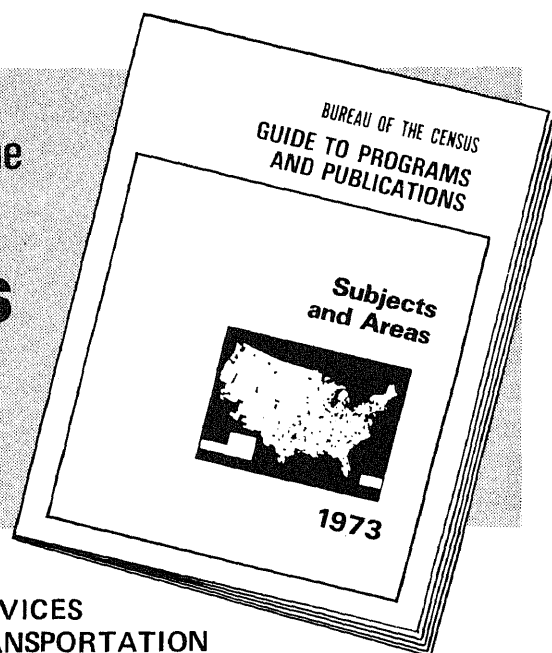
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Flour Milling Products

DECEMBER 1977

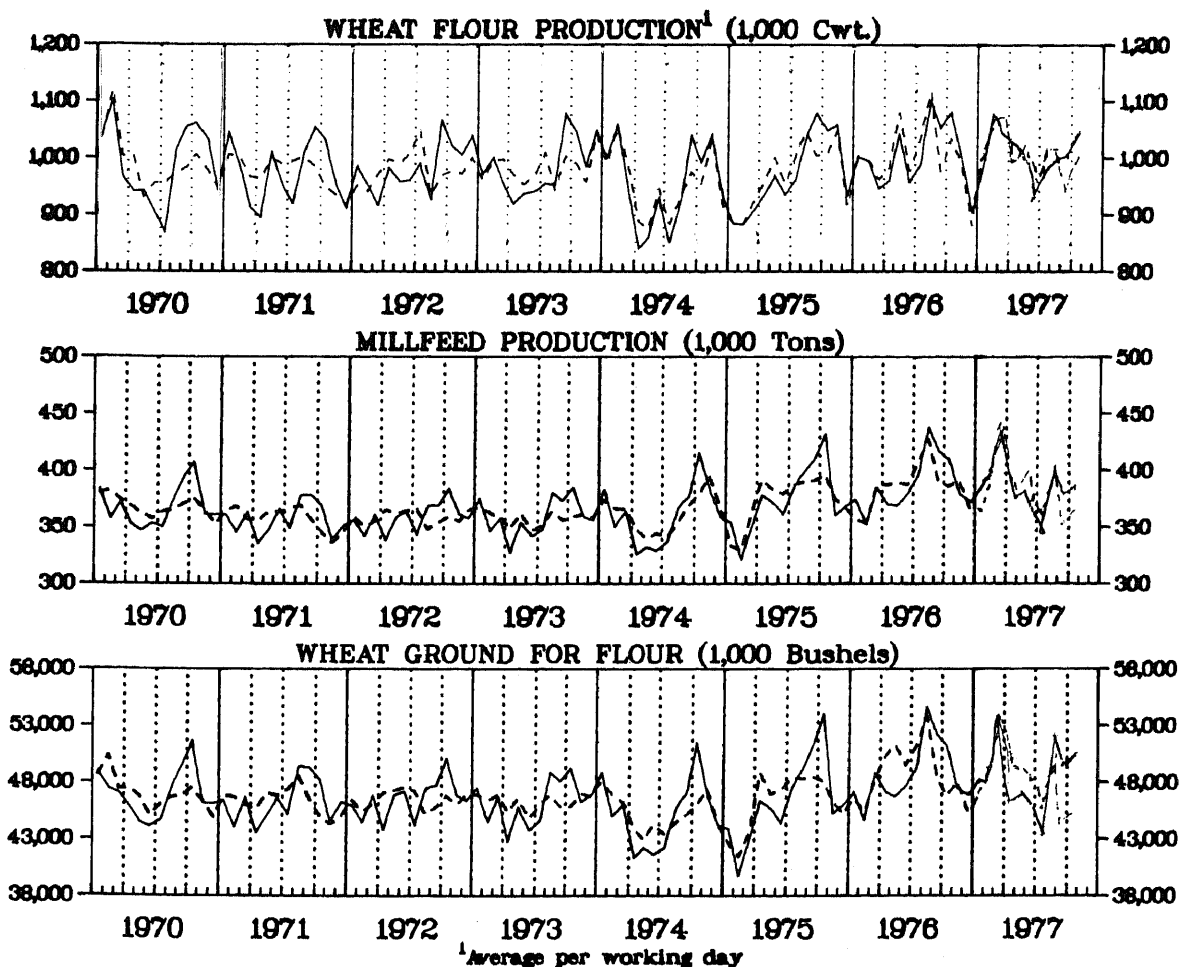
M20A(77)-12
Issued February 1978

The statistics in this publication are based on a survey of manufacturers and represent total U.S. production of flour milling products. Estimates are included for companies whose reports were not received in time for tabulation. A more com-

plete description of this survey appears on page 5. An annual current industrial report is published in this series. The annual report includes all the months for the current and previous years and incorporates all known revisions in the series.

WHEAT FLOUR MILLING: 1970 TO 1977

----- Seasonally Adjusted
———— Not Seasonally Adjusted



Address inquiries concerning these figures to U.S. Department of Commerce, Bureau of the Census, Industry Division, Washington, D.C. 20233, or call Marilyn Milazzo, (301) 763-2415.

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Table 1A.--SUMMARY OF WHEAT FLOUR MILLING: 1975 TO 1977

(Seasonally adjusted)			
Month and year	Wheat flour production average per working day ¹ (1,000 cwt.)	Millfeed production (1,000 tons)	Wheat ground for flour (1,000 bushels)
1977			
December.....	988	370	46,043
November.....	1,057	401	50,775
October.....	1,005	360	45,078
September.....	929	353	44,779
August.....	1,015	400	50,998
July.....	1,015	355	45,237
June.....	953	374	48,038
May.....	1,027	398	49,079
April.....	1,005	387	49,469
March.....	1,075	433	53,789
February.....	1,072	387	48,754
January.....	1,017	363	47,465
1976			
December.....	885	370	45,697
November.....	990	391	48,063
October.....	1,035	386	46,773
September.....	977	389	48,536
August.....	1,119	427	53,879
July.....	1,035	407	51,218
June.....	978	387	49,476
May.....	1,080	389	51,287
April.....	983	387	50,311
March.....	963	387	48,266
February.....	996	353	45,354
January.....	1,004	356	46,644
1975			
December.....	915	367	45,198
November.....	1,049	375	46,207

See footnotes at end of table 1B.

Table 1B.--SUMMARY OF WHEAT FLOUR MILLING: 1975 TO 1977

(Not seasonally adjusted)								
Month and year	Wheat flour production (1,000 cwt.)		Millfeed production (tons)	Wheat ground for flour (1,000 bushels)	Wheat flour mill stocks ² (1,000 cwt.)	Daily 24-hour capacity in wheat flour: ² (1,000 cwt.)	Wheat flour produced as percent of capacity	Flour extraction rate ³ (percent)
	Average per working day ¹	Calendar month total						
1977								
December.....	1,011	21,230	373,320	47,286	4,498	965	104.8	74.8
November.....	1,069	22,445	389,311	50,166	(NA)	968	110.4	74.6
October.....	1,050	22,054	382,730	49,360	(NA)	968	108.5	74.5
September.....	1,002	22,039	378,118	49,258	3,537	968	103.4	74.6
August.....	1,001	23,023	410,232	51,712	(NA)	957	104.6	74.2
July.....	970	19,393	344,584	43,518	(NA)	957	101.3	74.3
June.....	933	20,529	366,513	46,261	4,167	957	97.5	74.0
May.....	993	20,861	375,128	46,870	(NA)	976	101.8	74.2
April.....	982	20,632	369,798	46,402	(NA)	976	100.7	74.1
March.....	1,057	24,321	430,120	54,434	4,248	976	108.3	74.5
February.....	1,071	21,425	385,212	48,023	(NA)	990	108.2	74.4
January.....	1,015	21,320	380,273	48,035	(NA)	990	102.5	74.0
1976								
December.....	905	20,804	372,844	46,931	4,334	990	91.4	73.9
November.....	1,001	21,031	379,784	47,486	(NA)	998	100.3	73.8
October.....	1,082	22,723	410,072	51,216	(NA)	998	108.4	73.9
September.....	1,053	23,178	417,142	52,225	3,621	998	105.5	73.4
August.....	1,103	24,257	437,548	54,634	(NA)	990	111.4	74.0
July.....	989	21,751	395,596	49,272	(NA)	990	100.1	73.6
June.....	957	21,059	378,582	47,645	3,923	990	96.7	73.7
May.....	1,044	20,871	369,318	46,758	(NA)	997	104.7	74.4
April.....	960	21,113	369,972	47,192	(NA)	997	96.3	74.5
March.....	947	21,771	384,578	48,845	4,510	997	94.9	74.3
February.....	995	19,891	351,557	44,674	(NA)	991	100.4	74.2
January.....	1,002	21,034	373,719	47,204	(NA)	991	101.1	74.3
1975								
December.....	933	20,532	368,047	46,000	3,907	991	94.1	74.4
November.....	1,059	20,113	359,798	45,241	(NA)	995	106.9	74.0

Note: Data include estimate for small mills. The data shown for 1976 and 1977 exclude a number of plants that began operations during this period. These companies account for approximately 5-8 percent of our 1977 estimates. Revised monthly data will be shown in the annual summary to be released in early 1978. Data for January 1978 will include the production for these companies.

(NA) Not available.

¹The number of working days per month is computed on the basis of a 5-day week with allowances for the following holidays: January 1, Memorial Day, Independence Day, Thanksgiving Day, and December 25.

²Collected quarterly.

³Wheat flour production as compared with amount of wheat ground.

TABLE 2.--QUANTITY OF DURUM WHEAT AND RYE FLOUR PRODUCTION, GRAIN CONSUMPTION, MILL STOCKS, AND CAPACITY

PRODUCT CODE	DESCRIPTION OF ITEM	UNIT OF MEASURE	DECEMBER 1977	NOVEMBER 1977	DECEMBER 1976
DURUM WHEAT (INCLUDED IN TABLE 1 DATA):					
0011173	DURUM WHEAT GROUND.	M BU	3,017	3,174	2,917
2041153	STRAIGHT SEMOLINA DURUM FLOUR	M CWT	1,326	1,349	1,304
2041155	BLENDED SEMOLINA DURUM FLOUR.	DO	(D)	(D)	(D)
RYE:					
0011951	RYE GROUND FOR FLOUR.	M BU	334	332	364
2041611	RYE FLOUR PRODUCTION.	M CWT	153	149	171
2041618	RYE MILLFEED PRODUCTION	TONS	1,788	1,894	1,958
2041611	RYE FLOUR STOCKS (1).	M CWT	24	(NA)	24
	24 HOUR CAPACITY (1).	DO	10	10	10

Note: Data include estimates for small mills. Detail may not add to total due to independent rounding. These data exclude all flour blended by macaroni and spaghetti manufacturers, etc., as such activities are not within scope of this survey. Only mills engaged in milling flour or meal are included in this survey.

(D) Withheld to avoid disclosure of figures for individual companies. (NA) Not available.

¹Collected quarterly.

TABLE 3.--QUANTITY OF WHEAT GROUND FOR FLOUR AND WHEAT FLOUR PRODUCTION, BY DIVISIONS AND STATES
(WHEAT GROUND FOR FLOUR IN THOUSANDS OF BUSHEL; WHEAT PRODUCTION IN THOUSANDS OF HUNDREDWEIGHT)

GEOGRAPHIC AREA	DECEMBER 1977		NOVEMBER 1977		DECEMBER 1976	
	WHEAT GROUND FOR FLOUR	WHEAT FLOUR PRODUCTION	WHEAT GROUND FOR FLOUR	WHEAT FLOUR PRODUCTION	WHEAT GROUND FOR FLOUR	WHEAT FLOUR PRODUCTION
UNITED STATES, TOTAL.	47,286	22,387	50,166	23,747	46,931	20,804
MIDDLE ATLANTIC.	6,297	2,987	6,785	3,232	6,026	2,704
NEW YORK.	5,212	2,336	5,583	2,499	4,952	2,234
NORTH CENTRAL.	26,090	12,360	27,390	13,013	26,216	11,639
OHIO.	3,333	1,452	2,985	1,303	2,869	1,242
INDIANA.	1,256	549	1,225	537	1,263	529
ILLINOIS.	2,559	1,135	3,215	1,424	2,791	1,224
MICHIGAN.	486	349	563	387	744	324
MINNESOTA.	5,447	2,491	5,930	2,703	5,724	2,626
IOWA.	(D)	(D)	(D)	(D)	(D)	(D)
MISSOURI.	4,308	1,951	4,989	2,233	4,315	1,912
NEBRASKA.	(D)	(D)	(D)	(D)	1,568	671
KANSAS.	6,087	3,096	5,548	2,905	5,164	2,322
SOUTH ATLANTIC.	2,557	1,319	2,833	1,436	2,318	983
EAST SOUTH CENTRAL.	2,579	1,122	2,666	1,155	2,701	1,150
TENNESSEE.	2,031	888	2,147	931	2,052	871
WEST SOUTH CENTRAL.	2,933	1,473	3,119	1,532	2,796	1,229
OKLAHOMA.	1,301	598	1,367	630	1,274	578
TEXAS.	1,389	620	1,495	664	1,320	558
MOUNTAIN.	2,981	1,353	3,044	1,381	2,793	1,234
MONTANA.	704	331	772	367	644	292
UTAH.	(D)	(D)	(D)	(D)	(D)	(D)
PACIFIC.	3,849	1,773	4,329	1,998	4,081	1,865
WASHINGTON.	1,106	501	1,321	597	1,241	559
OREGON.	657	302	722	329	749	334
CALIFORNIA AND HAWAII.	2,086	970	2,286	1,072	2,091	972

Note: Detail may not add to total due to independent rounding.

(D) Withheld to avoid disclosure of figures for individual companies.

Table 4.--EXPORTS OF WHEAT AND WHEAT FLOUR

Country to which exported	November 1977	October 1977	11 months through November 1977
WHEAT FLOUR, EXCEPT MEAL AND GROATS, DONATED FOR RELIEF OR CHARITY (0460110) (1,000 cwt.)			
Total.....	148	373	3,341
Egypt.....	-	46	779
Guatemala.....	-	-	85
Colombia.....	2	9	95
Ecuador.....	-	-	5
Brazil.....	-	-	5
Israel.....	-	42	105
India.....	6	13	59
Chile.....	25	3	189
Sri Lanka (Ceylon).....	-	40	112
Philippine Republic.....	-	-	170
Morocco.....	62	74	621
Other.....	53	146	1,116
WHEAT FLOUR, WHOLLY U.S. WHEAT, EXCEPT DURUM FLOUR AND SEMOLINA (0460120) (1,000 cwt.)			
Total.....	762	467	16,667
Nicaragua.....	5	-	29
Jamaica.....	6	-	226
Brazil.....	-	-	22
Iceland.....	7	1	72
Jordan.....	-	-	110
Saudi Arabia.....	339	216	4,234
Sri Lanka (Ceylon).....	13	148	4,386
Egypt.....	-	-	-
Philippine Republic.....	-	-	13
Korean Republic.....	-	-	-
Morocco.....	-	-	-
Other.....	392	102	9,091
WHEAT, INCLUDING SPELT OR MESLIN, UNMILLED, NOT DONATED FOR RELIEF OR CHARITY (0410020) (1,000 bu.)			
Total.....	56,667	68,258	77, -
U.S.S.R.....	10,560	2,812	96,637
Venezuela.....	1,505	2,205	21,535
Peru.....	146	63	155,673
Brazil.....	2,605	965	18,562
Portugal.....	-	1,817	19,576
Iran.....	1,324	1,109	-
Indonesia.....	1,345	-	15,163
Korean Republic.....	525	2,957	57,246
China (Taiwan).....	1,396	992	16,241
Japan.....	2,611	9,900	109,031
Egypt.....	2,624	3,624	46,681
Nigeria.....	1,580	1,496	22,463
Other.....	30,446	40,318	198,420

Note: Data in this table are taken from Foreign Trade publication FT410, U.S. Exports. The Schedule B codes are as follows: 0460110, wheat flour (except meal and groats); 0460120, wheat flour (wholly of U.S. wheat, except durum flour and semolina); 0410020, wheat, including spelt or meslin, unmilled, not donated for relief or charity.

- Represents zero.

DESCRIPTION OF SURVEY

Scope of Survey—This survey covers firms engaged in the production of wheat and rye flour. The reporting panel consists of mills with a daily capacity of over 400 sacks of flour.

Sampling Description—The data shown in this publication were collected on Bureau of the Census monthly Form M-20A, Flour Milling Products. The aggregates published in this report have been compiled from a sample of approximately 250 respondents, accounting for 98 percent of the total U.S. production of flour mill products. The universe for this sample was the 1958 Census of Manufactures. Approximately 200 small establishments are in the nonmail universe. Their production data are estimated based upon their 1958 Census of Manufactures report. The monthly reporting panel was selected by arraying the reporting units in descending order by size for each product line, then choosing a sufficient number of respondents (beginning with the largest) to yield a coverage of approximately 98 percent for each product line.

Survey Error—The current month's figures include estimates for respondents in the reporting panel whose reports were not received in time for tabulation, as well as for 200 small respondents excluded from the mail panel. Missing figures for companies in the reporting panel are imputed from the month-to-month movements shown by reporting firms. The overall imputation rate is generally limited to 12 percent, including about 2 percent for small respondents excluded from the monthly reporting panel. Individual items with a higher than 12-percent imputation rate are footnoted.

The imputation rate is not an explicit indicator of the potential error in published figures due to nonresponse, both because the actual monthly movements for nonrespondents may or may not closely agree with the imputed movements, and because the estimates for nonpanel cases may or may not reflect their current activity. The probable difference between the actual and imputed figures is unknown. The degree of uncertainty regarding the accuracy of the data, however, increases as the percentage of imputation increases. Figures with imputation rates above 12 percent, particularly, should be used with caution.

Revision to Previous Period Data—Statistics for previous months may be revised due to receipt of corrected data from respondents, including late reports for which estimates were made, and other corrections. Figures which have been revised by more than 5 percent from previously published figures are indicated by footnotes.

Reporting Period Adjustment—Beginning January 1975, the data were adjusted for the number of working days in the reporting period to compensate for differences in individual company reporting patterns, i.e., calendar month, 4-week, 5-week periods.

Seasonal Adjustment—This report presents seasonally adjusted data in table 1A for selected series shown in table 1B. The data were seasonally adjusted using the X-11 variant of the Bureau of the Census method II seasonal adjustment program. This seasonal adjustment program is a ratio-to-moving-average method. The seasonal adjustment program largely eliminates the effect of seasonal variations (intra-year variations repeated constantly from year to year) within the series. The seasonally adjusted data usually provide a better measure than the not seasonally adjusted (original) data of the month-to-month variations which are due to factors other than seasonal pattern.

EXPLANATION OF TERMS

Units of Quantity—Grain ground is measured in bushels of 60 pounds for wheat, and 56 pounds for rye. Flour production is measured in sacks of 100 pounds.

Capacity—Based on replies to the question, "What is the maximum quantity of flour that can be produced in your mill in one day if operated for 24 hours?", the capacity of idle mills is included until the mills are reported to be destroyed, dismantled, or abandoned.

Grain—Represents the purchased weight of grain ground, including the weight of foreign material (dockage).

Millfeed—Includes bran, middlings, shorts, and other milling byproducts intended principally for use as feed materials.

Wheat Flour—Includes whole wheat flour, farina, industrial flour, and durum flour.

Stocks of Flour (quarterly)—Represents mill stocks in all positions, sold and unsold.

RELATED REPORTS

An annual current industrial report is published in this series. The annual report summarizes monthly figures and incorporates all known revisions in the series for both current and previous year, thus, providing a single reference copy to replace the monthly publications. This annual summary provides additional information on the history of this survey.

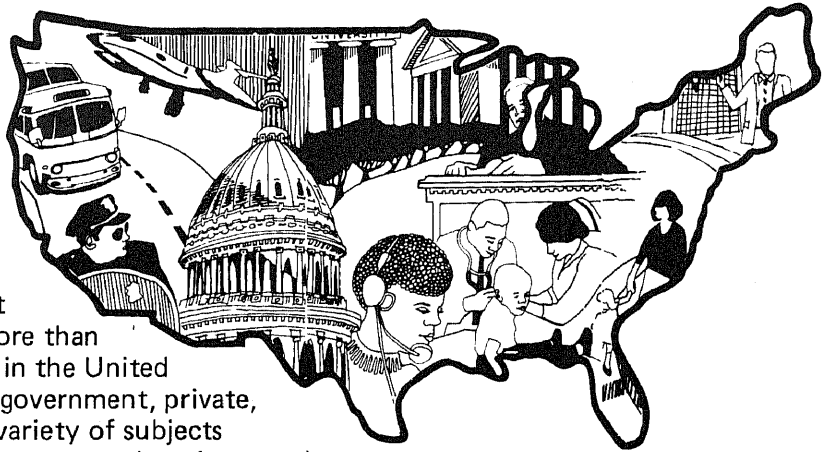
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FT-135	Monthly	U.S. General Imports—Schedule A—Commodity by Country

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Flour Milling Products



U.S. Department of Commerce
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SUMMARY FOR 1977

M20A(77)-13
Issued September 1978

SUMMARY OF FINDINGS

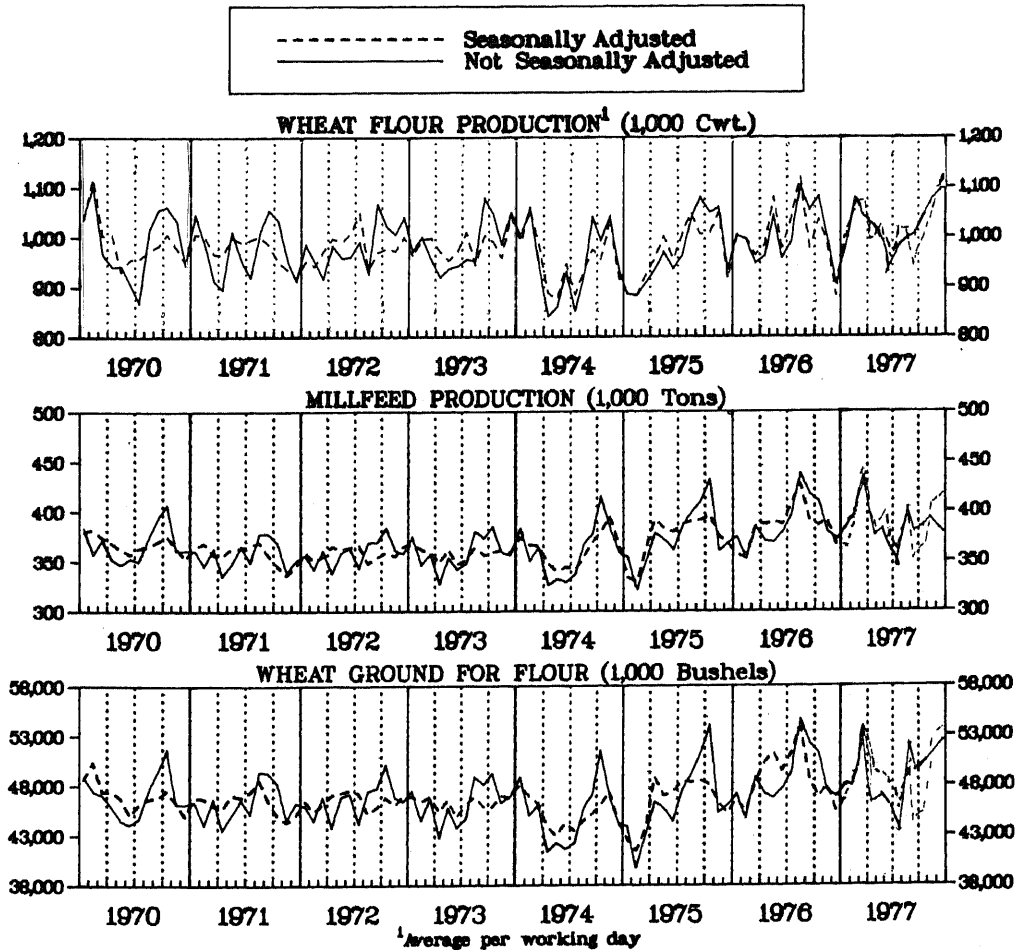
Total commercial production of wheat flour in 1977 amounted to 261.4 million cwt. sacks about 1.9 million cwt. sacks above the 1976 production. Production figures in 1977 and 1976 were at 100.3 and 101.6 percent, respectively, of total annual capacity.

Wheat mills in 1977 and 1976 ground 586.1 and 584.1 million bushels of wheat; corresponding millfeed production figures for these years were 4,593 and 4,643 thousand tons.

Production of rye flour in 1977 amounted to 1,660 thousand cwt. sacks, compared with 1,759 thousand cwt. in 1976. Rye grinding in 1977 and 1976 were 3,637 and 3,854 thousand bushels, respectively.

THIS REPORT INCLUDES DATA COMPARING DOMESTIC OUTPUT, EXPORTS, AND IMPORTS

WHEAT FLOUR MILLING: 1970 TO 1977



Address inquiries concerning these figures to U.S. Department of Commerce, Bureau of the Census, Industry Division, Washington, D.C. 20233 or call Geraldine Bynum, (301) 763-7808.

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Table 1. SUMMARY: COMMERCIAL WHEAT MILLING PRODUCTION: 1952 TO 1977

Year	Wheat flour production ¹ (1,000 cwt. sacks)	Wheat ground for flour (1,000 bushels)	Millfeed production (1,000 tons)	Average pounds per cwt. sacks of flour		Flour extraction rate ² (percent)
				Wheat	Millfeed	
1952.....	228,148	532,374	4,605	140.0	40.4	71.4
1953.....	222,177	515,446	4,432	139.2	39.9	71.8
1954.....	221,405	514,028	4,440	139.3	40.1	71.8
1955.....	225,648	522,851	4,482	139.0	39.7	71.9
1956.....	229,758	527,159	4,416	137.7	38.4	72.6
1957.....	238,888	548,532	4,584	137.8	38.4	72.6
1958.....	248,004	566,688	4,713	137.1	38.0	72.9
1959.....	250,568	570,856	4,707	136.7	37.6	73.2
1960.....	255,141	582,719	4,827	137.0	37.8	73.0
1961.....	260,316	591,999	4,858	136.4	37.3	73.3
1962.....	262,069	595,353	4,876	136.3	37.2	73.4
1963.....	260,007	589,245	4,794	136.0	36.9	73.5
1964.....	261,663	591,654	4,890	135.7	37.4	73.7
1965.....	250,384	564,724	4,645	135.3	37.1	73.9
1966.....	253,000	568,672	4,619	134.8	36.5	74.1
1967.....	245,240	549,801	4,423	134.5	36.1	74.3
1968.....	254,185	569,649	4,511	134.5	35.5	74.4
1969.....	254,094	567,956	4,458	134.1	35.1	74.6
1970.....	253,094	563,714	4,409	133.6	34.8	74.8
1971.....	249,810	555,092	4,279	133.3	34.3	75.0
1972.....	250,441	557,801	4,303	133.6	34.4	74.8
1973.....	249,265	555,269	4,303	133.7	34.5	74.8
1974.....	242,157	542,904	4,323	134.5	35.7	74.5
1975.....	247,080	555,891	4,485	134.9	36.3	74.1
1976.....	259,486	584,082	4,643	135.1	35.8	74.0
1977.....	261,405	586,145	4,593	134.5	35.1	74.3

¹Based on 1954 Census of Manufactures. See Census report MC-20D, Grain Mill Products.²Wheat flour production as compared with the amount of wheat ground.

Table 2. COMMERCIAL WHEAT MILLING PRODUCTION, SEASONALLY ADJUSTED AND UNADJUSTED, BY MONTHS: 1977 AND 1976

Month	Seasonally adjusted			Unadjusted						
	Wheat flour production average per working day ¹ (1,000 cwt. sacks)	Wheat ground for flour (1,000 bushels)	Mill feed production (1,000 tons)	Wheat flour production (1,000 cwt. sacks)		Wheat ground for flour (1,000 bushels)	Mill feed production (1,000 tons)	Average pounds per cwt. sack of flour		Flour extraction rate ² (percent)
				Average per working day ¹	Calendar month, total			Wheat	Millfeed	
1977										
Total.....	(X)	(X)	(X)	(X)	261,405	586,145	4,593	134.5	35.1	74.3
January.....	1,017	47,465	363	1,015	21,320	48,035	380	135.2	35.6	74.0
February.....	1,072	48,754	387	1,071	21,425	48,023	385	134.5	35.9	74.4
March.....	1,075	53,789	433	1,057	24,321	54,434	430	134.3	35.4	74.5
April.....	1,005	49,469	387	982	20,632	46,402	370	134.9	35.9	74.1
May.....	1,027	49,079	398	993	20,861	46,870	375	134.8	36.0	74.2
June.....	953	48,038	374	933	20,529	46,261	367	135.2	35.8	74.0
July.....	1,015	45,237	355	970	19,393	43,518	345	134.6	35.6	74.3
August.....	1,015	50,998	400	1,001	23,023	51,712	410	134.8	35.6	74.2
September.....	929	44,779	353	1,002	22,039	49,258	378	134.1	34.3	74.6
October.....	1,005	45,078	360	1,050	22,054	49,360	383	134.3	34.7	74.5
November.....	1,057	50,775	401	1,069	22,445	50,166	389	134.1	34.7	74.6
December.....	1,137	53,169	421	1,112	23,363	52,106	381	133.8	32.6	74.7
1976										
Total.....	(X)	(X)	(X)	(X)	259,486	584,082	4,643	135.1	35.8	74.0
January.....	1,004	46,644	356	1,002	21,037	47,204	374	134.7	35.6	74.3
February.....	996	45,354	353	995	19,891	44,674	352	134.8	35.4	74.2
March.....	963	48,266	387	947	21,771	48,845	385	134.6	35.4	74.3
April.....	983	50,311	387	960	21,113	47,192	370	134.1	35.0	74.5
May.....	1,080	51,287	389	1,044	20,871	46,758	369	134.4	35.4	74.4
June.....	978	49,476	387	957	21,059	47,645	379	135.7	36.0	73.7
July.....	1,035	51,218	407	989	21,751	49,272	396	135.9	36.4	73.6
August.....	1,119	53,879	427	1,103	24,257	54,634	438	135.1	36.1	74.0
September.....	977	48,536	389	1,053	23,178	52,225	417	135.2	36.0	73.4
October.....	1,035	46,773	386	1,082	22,723	51,216	410	135.2	36.1	73.9
November.....	990	48,063	391	1,001	21,031	47,486	380	135.5	36.1	73.8
December.....	885	45,697	370	905	20,804	46,931	373	135.4	35.9	73.9

(X) Not applicable.

¹The number of working days per month is computed on the basis of a 5-day week with allowances for the following holidays, unless such holidays fall on Saturday: January 1, May 30, July 4, Labor Day, Thanksgiving Day, and December 25.²Wheat flour production is compared with amount of wheat ground.

Table 3. COMMERCIAL RYE MILLING PRODUCTION, BY MONTHS: 1977 AND 1976

Month	Rye flour production (1,000 cwt. sacks)	Rye ground for flour (1,000 bushels)	Millfeed production (tons)	Average pounds ground per cwt. sack of flour		Flour extraction rate ¹ (percent)
				Rye	Millfeed	
1977						
Total.....	1,660	3,637	19,200	122.7	23.1	81.5
January.....	140	305	1,751	122.0	25.0	82.0
February.....	130	302	1,410	130.1	21.8	76.9
March.....	141	316	1,690	125.5	22.0	79.7
April.....	135	282	1,413	117.0	20.9	85.5
May.....	126	272	1,396	120.9	22.2	82.7
June.....	131	277	1,389	118.4	21.2	84.5
July.....	125	263	1,377	117.8	22.0	84.9
August.....	151	328	1,688	121.6	22.4	82.2
September.....	143	313	1,650	122.6	23.1	81.6
October.....	136	313	1,754	128.9	25.8	77.6
November.....	149	332	1,894	124.8	25.4	80.1
December.....	153	334	1,788	122.2	23.4	81.8
1976						
Total.....	1,759	3,854	21,292	122.7	24.2	81.5
January.....	181	390	2,040	120.7	22.5	82.9
February.....	142	308	1,645	121.5	23.2	82.3
March.....	163	353	1,939	121.3	23.8	82.5
April.....	150	333	1,820	124.3	24.3	80.4
May.....	113	251	1,267	124.4	22.4	80.4
June.....	150	320	1,933	119.5	25.7	83.7
July.....	137	305	1,680	124.7	24.5	80.2
August.....	144	322	1,855	125.2	25.8	79.9
September.....	135	298	1,722	123.6	25.5	80.9
October.....	130	285	1,661	122.8	25.6	81.5
November.....	143	325	1,772	127.3	24.8	78.6
December.....	171	364	1,958	119.2	22.9	83.9

¹Revised from previously published figures.¹Rye flour production as compared with amount of rye ground.

Table 4. COMMERCIAL WHEAT MILLING PRODUCTION, BY GEOGRAPHIC AREAS: 1977 AND 1976

Geographic areas	1977				1976			
	Wheat ground for flour (1,000 bushels)	Wheat flour production			Wheat ground for flour (1,000 bushels)	Wheat flour production		
		Total (1,000 cwt. sacks)	Daily (24 hour) capacity ¹ (cwt. sacks)	Percent of estimated annual capacity ²		Total (1,000 cwt. sacks)	Daily (24 hour) capacity ¹ (cwt. sacks)	Percent of estimated annual capacity ²
United States, total.....	586,145	261,405	1,021,624	100.3	584,082	259,486	990,109	101.6
Middle Atlantic Division.....	75,261	33,706	132,681	99.6	73,201	32,572	127,143	99.3
New York.....	62,175	28,008	105,732	103.9	60,815	27,208	106,314	99.2
North Central Region.....	323,900	144,587	567,262	100.0	330,469	146,342	557,037	101.8
Ohio.....	33,967	14,727	62,201	92.9	36,206	15,707	69,995	87.0
Indiana.....	15,165	6,486	21,483	118.4	15,502	6,554	21,283	119.4
Illinois.....	36,662	16,064	60,355	104.4	35,081	15,362	64,311	92.6
Michigan.....	9,147	4,153	20,049	81.2	9,374	4,053	19,511	80.5
Minnesota.....	70,372	32,236	128,011	98.8	70,980	32,151	117,131	106.4
Iowa.....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
Missouri.....	53,502	23,881	86,762	107.9	52,811	23,589	84,850	107.8
Nebraska.....	(D)	(D)	(D)	(D)	18,869	7,965	34,156	90.4
Kansas.....	69,066	31,114	120,398	101.3	70,366	31,570	106,966	114.4
South Atlantic Division.....	33,484	14,342	52,462	107.2	30,936	13,754	44,303	120.3
East South Central Division.....	31,504	13,610	48,293	110.5	30,908	13,601	54,057	97.5
Tennessee.....	24,574	10,641	36,817	113.3	24,098	10,445	35,481	114.1
West South Central Division.....	36,984	16,502	58,530	110.6	35,970	15,931	57,799	106.8
Oklahoma.....	16,511	7,526	28,037	105.3	16,545	(D)	27,509	(D)
Texas.....	17,059	7,497	28,158	104.4	16,599	7,113	25,290	109.0
Mountain Division.....	33,688	15,158	66,531	89.3	33,611	14,912	65,360	88.4
Montana.....	8,170	3,861	17,797	85.1	7,773	3,528	13,736	99.6
Utah.....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
Pacific Division.....	51,324	23,500	95,865	96.1	48,987	22,374	84,410	102.7
Washington.....	15,696	7,076	27,481	101.0	15,183	6,833	27,481	96.4
Oregon.....	9,398	4,238	20,025	83.0	9,195	4,122	20,025	79.8
California and Hawaii.....	26,230	12,186	48,359	98.8	24,609	11,419	36,904	120.0

(D) Withheld to avoid disclosing figures for individual companies.

¹Capacity as reported for December of each year. ²Estimated annual capacity is obtained by multiplying daily capacity by the number of work days during the year, 255 for 1977, and 258 for 1976. This figure is calculated on the basis of a 5-day week with allowances for the following holidays unless such holidays fall on Saturday: January 1, Memorial Day, July 4, Labor Day, Thanksgiving Day, and December 25.

Table 5. PRODUCTION AND MILL STOCKS OF WHEAT FLOUR, BY QUARTERS: 1977 AND 1976

Quarter	Production (1,000 cwt. sacks)	Mill stocks (1,000 cwt. sacks)
1977		
First.....	67,066	4,248
Second.....	62,022	4,167
Third.....	64,455	3,537
Fourth.....	67,862	4,160
1976		
First.....	62,699	4,510
Second.....	63,043	3,923
Third.....	69,186	3,621
Fourth.....	64,558	4,334

Table 6. DURUM WHEAT PRODUCTS: 1977 AND 1976

Item	1977		1976	
	Jan. 1- June 30	July 1- Dec. 31	Jan. 1- June 30	July 1- Dec. 31
Durum wheat ground (thousand bushels).....	18,673	19,056	17,186	17,940
Straight semolina and durum flour produced (thousand sacks (cwt.)).....	8,110	8,253	7,434	7,915
Blended semolina and durum flour produced (thousand sacks (cwt.)).....	(D)	(D)	(D)	(D)

(D) Withheld to avoid disclosing figures for individual companies.

Table 7. PRODUCTION, EXPORTS, IMPORTS, AND APPARENT CONSUMPTION OF WHEAT FLOUR AND SEMOLINA AND DURUM FLOUR: 1977 AND 1976

(Quantity in 1,000 cwt., value in \$1,000)

Product code	Item	Quantity produced	Exports of domestic merchandise ¹		Percent exports to manufac- turers' production	Imports for consump- tion ²	Calculated import duty (\$1,000)	Apparent consump- tion ³ (1,000 cwt.)
			Quantity	Value				
	1977							
20411 --	Wheat flour.....	261,405	21,501	177,007	8.2	-	-	239,904
20411 --	Semolina and durum flour.....	16,363	138	1,396	0.8	-	-	16,225
	1976							
20411 --	Wheat flour.....	259,486	15,663	157,266	6.0	-	-	243,823
20411 --	Semolina and durum flour.....	15,349	30	264	0.2	-	-	15,319

Note: Comparison of import and export codes is as follows:

¹Source: Bureau of the Census Report FT-410, U.S. Exports of Domestic Merchandise; SIC-Based Products and Area.²Source: Bureau of the Census Report FT-135, U.S. Imports for Consumption and General Imports; SIC-Based Products and Area.³Apparent consumption is derived by subtracting exports from the total manufacturers' production. Imports are not used in this instance because import data for flour are not separately available. Imports (TSUSA codes 1314000 and 1318500) of flour are considered to be insignificant.

Domestic output	Exports	Imports
20411 -- Wheat flour.....	0460110;0460120	-
20411 -- Semolina and durum flour.....	0460130	-

DESCRIPTION OF SURVEY

Scope of Survey—This survey includes firms engaged in the production of wheat and rye flour. The reporting panel consists of mills with a daily capacity of over 400 sacks of flour.

Sampling Description—The data shown in this publication were collected on Bureau of the Census monthly Form M20A, Flour Milling Products. The aggregates published in this report have been compiled from a sample of approximately 250 respondents accounting for 98 percent of the total U.S. production of flour mill products. The universe for this sample was the 1958 Census of Manufactures. Approximately 200 small establishments are in the nonmail universe. Their production data are estimated based upon their 1958 Census of Manufactures report. The monthly reporting panel was selected by arraying the reporting units in descending order by size for each product line, then choosing a sufficient number of respondents (beginning with the largest) to yield a coverage of approximately 98 percent for each product line.

Survey Error—The money figures include estimates for respondents in the reporting panel whose reports were not received in time for tabulation, as well as for 200 small respondents excluded from the mail panel. Missing figures for companies in the reporting panel are imputed from the month-to-month movements shown by reporting firms. The overall imputation rate is generally limited to 12 percent, including about 2 percent for small respondents excluded from the monthly reporting panel. Individual items with a higher than 12-percent imputation rate are footnoted.

The imputation rate is not an explicit indicator of the potential error in published figures due to nonresponse, both because the actual monthly movements for nonrespondents may or may not closely agree with the imputed movements, and because the estimates for nonpanel cases may reflect their current activity. The probable difference between the actual and imputed figures is unknown. The degree of uncertainty regarding the accuracy of the data, however, increases as the percentage of imputation increases. Figures with imputation rates above 12 percent, particularly, should be used with caution.

Revision to Previous Period Data—Statistics for previous months may be revised due to receipt of corrected data from respondents, including late reports for which estimates were previously made as described above, and other corrections. Figures which have been revised by more than 5 percent from previously published figures are indicated by footnotes.

Reporting Period Adjustment—Since January 1975, the data have been adjusted for the number of working days in the reporting period in order to compensate for differences in individual company reporting patterns, i.e., calendar month, 4-week, 5-week periods.

Seasonal Adjustment—This report presents seasonally adjusted data in table 1A for selected series shown in table 1B. The data were seasonally adjusted using the X-11 variant of the

Bureau of the Census Method II seasonal adjustment program. This program is a ratio-to-moving average method. It largely eliminates the effect to seasonal variations (intra-year variations repeated constantly from year to year) within the series. The seasonally adjusted data provide a better measure of the month-to-month variations which are due to factors other than seasonal pattern. Additional information concerning seasonal adjustment is available in the seasonal adjustment supplement issued in this series.

EXPLANATION OF TERMS

Units of Quantity—Grain ground is measured in bushels of 60 pounds for wheat, 56 pounds for rye. Flour production is measured in sacks of 100 pounds.

Capacity—Based on replies to the question "What is the maximum quantity of flour that can be produced in your mill in one day if operated for 24 hours?" The capacity of idle mills is included until the mills are reported to be destroyed, dismantled, or abandoned.

Grain—Represents the purchased weight of grain ground, including the weight of foreign material (dockage).

Millfeed—Includes bran, middlings, shorts, and other milling byproducts intended principally for use as feed materials.

Wheat flour—Includes whole wheat flour, farina, industrial flour, and durum flour.

Stocks of Flour (quarterly)—Represents mill stocks in all positions, sold and unsold.

COMPARISON OF EXPORT, IMPORT, AND DOMESTIC OUTPUT DATA

Generally, it is somewhat easier to find a reasonable statistical basis for a comparison of exports with domestic output than for a comparison of imports with domestic output. Aside from the differences in the basic commodity classifications used, there are a substantial number of imported commodities which are not produced in the United States or are produced in very small quantities. On the other hand, the merchandise exported from the United States is ordinarily produced in this country and reflects items important in output.

There are other problems affecting the comparability of the three sets of data. Differences in methods of valuation is perhaps the principal such problem. There may be elements of duplication in output data but not in imports or exports; low-value transactions are excluded from data for individual export and import commodity classifications; and a small portion of manufacturing output is not allocated to detailed commodity lines. All of these factors affect comparability to some degree. For these reasons the relationships shown in this report should be considered as only approximations.

(a) *Valuation*—Domestic producers' shipments, or production, are usually valued at the point of production—the factory, mine, or farm.

On the other hand, exports are by definition values at the point of exportation—seaport, border point, or airport. Export values are the selling price, or cost if not sold, and include expenditures for freight, insurance, and other charges to the export point.

Further, the exporters' trade margin above costs increases the export values compared with producers' values. Information on the magnitude of this incremental margin on a commodity-by-commodity basis is not available.

The dollar value shown for imports in the basic statistics is defined ordinarily as the market value in the foreign country and excludes U.S. import duties, transportation, insurance, and other costs. In actual practice only the values reported for imports subject to an ad valorem rate of duty (accounting for 10 to 15 percent of total imports) tend to conform to this definition. For other imports, the reported values may inadvertently include ocean freight; intracompany shipments may reflect arbitrary values; etc.

Thus, import values tend to understate the unit prices at which imported goods are sold in the U.S. market, in that they do not cover transportation, insurance costs, import duties, and other costs. By the same token, the total value of imports relative to domestic output tends to be understated if viewed at the point of entry into the U.S. market. The calculated value of import duties is shown separately for each commodity line in the table, but sufficient information is not available on the transportation, insurance, and other costs for individual commodities for those costs to be shown in this report.

(b) *Duplication in Quantity and Value of Output*—Because producers' shipments of some commodities may be used as materials for incorporation into other commodities, combinations of data for such commodities may contain a certain amount of duplication. Thus, percentages of exports to output or imports to apparent consumption (output plus imports minus exports) at 4-digit or broader levels may be understated.

Where the duplication is known to be substantial, the output data are appropriately noted in the table.

(c) *Low-Value Export and Import Transactions*—Commodity information is not shown for individual imports valued under \$251. For exports, commodity information is not reported for shipments individually valued under \$251 effective October 1969 and for shipments valued under \$100 prior to October 1969. This is believed to have only negligible effect on the statistics for the bulk of the commodities.

(d) *Manufacturers' Shipments, Not Specified by Kind*—The value of manufacturers' shipments at the 4-digit commodity level often includes a small amount which is not distributed among the individual 5-digit product classes. Export and import percentages at the more detailed levels might thus be slightly overstated.

(e) *Time Lag Between Output and Exports*—There will sometimes be a lag between the time a commodity is produced or shipped by the producer and the time it is actually exported. The time lag will usually be greater if the merchandise moves

through intermediaries (wholesalers, exporters) rather than directly from producers into the export market. Ordinarily, this type of discrepancy would not be very important in annual figures.

(f) *"Direct" vs "Total" Commodity Exports*—The commodity export data in this report represent direct exports of those commodities. They do not include the exports of the commodities which are incorporated into other, more finished products and exported in finished form. Thus, by showing only direct exports, the relation of exports to output for intermediate products, such as steel shapes and forms, is considerably understated. The figures for steel exported as such, does not include steel incorporated in automobiles, tractors, etc., which are also exported.

(g) *Used Commodities*—With a few exceptions, used or rebuilt commodities are classified in the same import or export codes as is new merchandise. Percentages are thus overstated to the extent that used or rebuilt products are significant in trade.

HISTORICAL NOTE

The current M20A series of monthly reports with annual summaries of wheat ground and wheatmilling products originated in May 1923. Data by States have been published monthly since 1927. Beginning in 1931 and ending with the June 1947 report, monthly wheat flour production by capacity groups was published. The annual summary report during the years 1931 to 1964 also contained a table showing production by capacity groups. Past copies of this report and other Current Industrial Reports can be found in the Federal Depository Library in your area. These libraries keep Current Industrial Reports (called Facts for Industry, before 1959) permanently available.

RELATED REPORTS

A monthly report is also published in this series.

The Bureau of the Census also publishes reports on other related products as follows:

Series	Frequency	Title
<i>Current Industrial Reports</i>		
M3-1	Monthly	Manufacturers' Shipments, Inventories, and Orders
M20C	Monthly	Confectionery, Including Chocolate Products
<i>Foreign Trade Reports</i>		
FT-410	Monthly	U.S. Exports—Schedule B—Commodity by Country
FT-135	Monthly	U.S. General Imports—Schedule A—Commodity by Country

CONTACTS FOR DATA USERS

Subject Area	Contact	Phone Number
Current Industrial Report M20A	Geraldine Bynum	(301) 763-7807
Foreign Trade publications	Juanita Noone	(301) 763-5140
To order a Census Bureau publication	Daisy Williams	(301) 763-7472

Subject Area	Contact	Phone Number
To order Census Bureau microfiche	Dorothy Dunham	(301) 763-5042

ACKNOWLEDGMENTS

This report was prepared in the Industry Division under the direction of Robert J. Nealon, Chief, Current Nondurables Branch and Carole A. Klein, Chief, Food, Apparel, and Textiles Section. Geraldine Bynum was directly responsible for the review of the data and preparation of the report. Milton Eisen, Chief of the Division, and John R. Wikoff, Assistant Chief for Current Programs, provided overall direction and coordination to this project.

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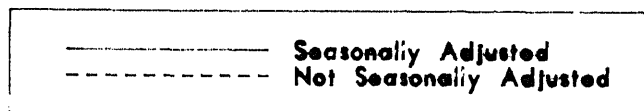
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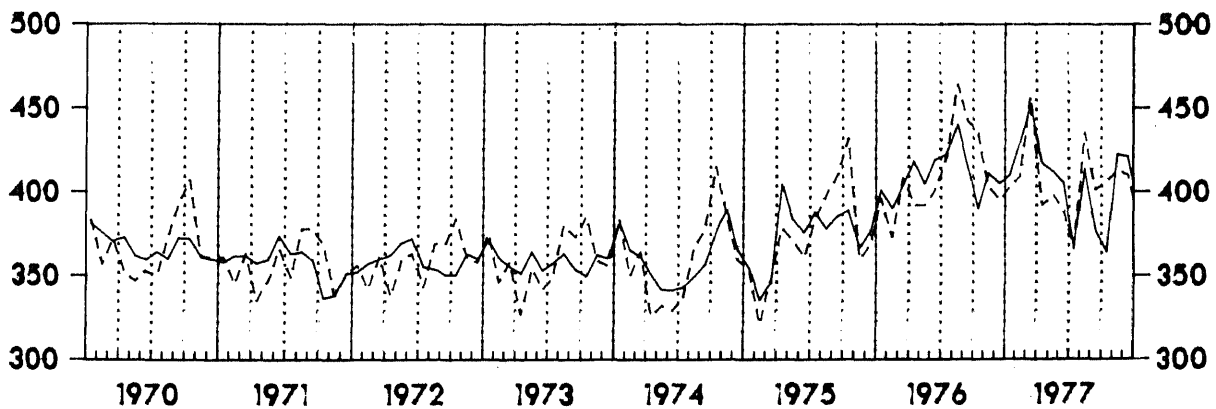
The data as shown in this report supersede those data published in the M20A Summary for 1977. Approximately six establishments were added to this survey in January 1978 based upon an extensive reconciliation with the 1976 Annual Survey of

Manufactures (ASM). Data for 1976 and 1977 have been estimated for these plants based upon their 1976 ASM data and their 1978 M20A reports.

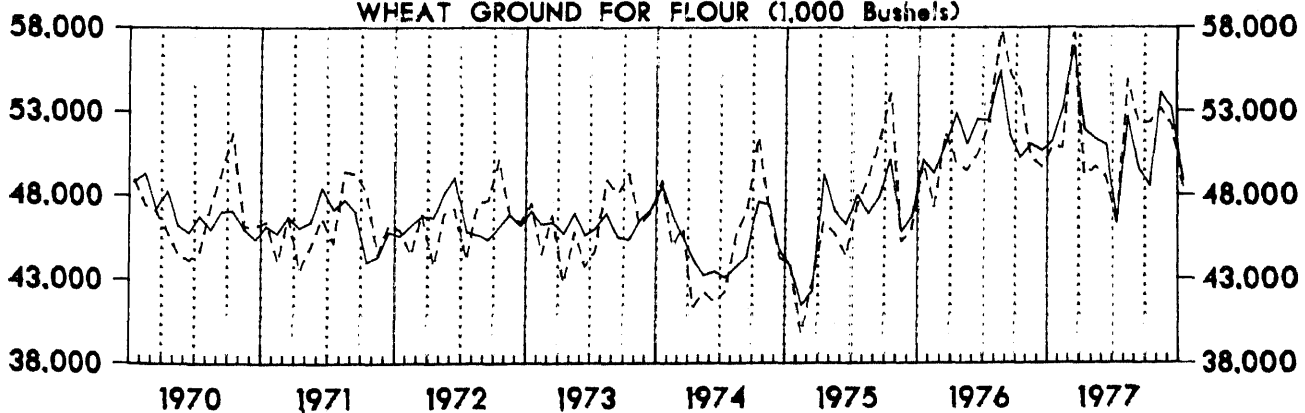
WHEAT FLOUR MILLING: 1970 TO 1977



MILLEED PRODUCTION (1,000 Tons)



WHEAT GROUND FOR FLOUR (1,000 Bushels)



Address inquiries concerning these figures to U.S. Department of Commerce, Bureau of the Census, Industry Division, Washington, D.C. 20233 or call Geraldine Bynum, (301) 763-7808.

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Table 1. COMMERCIAL WHEAT MILLING PRODUCTION, BY GEOGRAPHIC AREAS: 1976 AND 1977

Geographic area	1977				1976			
	Wheat ground for flour (1,000 bushels)	Wheat flour production			Wheat ground for flour (1,000 bushels)	Wheat flour production		
		Total (1,000 cwt. sacks)	Daily (24 hour) capacity ¹ (cwt. sacks)	Percent of estimated annual capacity ²		Total (1,000 cwt. sacks)	Daily (24 hour) capacity ¹ (cwt. sacks)	Percent of estimated annual capacity ²
United States, total.....	618,125	275,784	1,072,143	101.9	618,284	275,077	1,040,628	102.5
Middle Atlantic Division.....	79,695	35,981	138,781	101.7	77,996	34,796	133,243	101.2
New York.....	62,175	28,008	105,732	103.9	60,815	27,208	106,314	99.2
North Central Region.....	338,391	150,371	589,622	100.0	345,956	153,051	579,397	102.4
Ohio.....	33,967	14,727	62,201	92.9	36,206	15,707	69,995	87.0
Indiana.....	15,165	6,486	21,483	118.4	15,502	6,554	21,283	119.4
Illinois.....	36,662	16,064	60,355	104.4	35,081	15,362	64,311	92.6
Michigan.....	9,147	4,153	20,049	81.2	9,374	4,053	19,511	80.5
Minnesota.....	70,372	32,236	128,011	98.8	70,980	32,151	117,131	106.4
Iowa.....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
Missouri.....	53,502	23,881	86,762	107.9	52,811	23,589	84,850	107.8
Nebraska.....	(D)	(D)	(D)	(D)	24,241	10,452	41,756	97.0
Kansas.....	78,524	35,769	135,158	103.8	80,481	36,037	121,726	114.7
South Atlantic Division.....	38,615	16,986	61,838	107.7	36,359	16,545	53,679	119.5
East South Central Division.....	31,504	13,610	48,293	110.5	30,908	13,601	54,057	97.5
Tennessee.....	24,574	10,641	36,817	113.3	24,098	10,445	35,481	114.1
West South Central Division.....	40,507	18,198	63,530	112.3	39,810	17,665	62,799	109.0
Oklahoma.....	16,511	7,526	28,037	105.3	16,545	(D)	27,509	(D)
Texas.....	17,059	7,497	28,158	104.4	16,599	7,113	25,290	109.0
Mountain Division.....	33,688	15,158	66,531	89.3	33,611	14,912	65,360	88.4
Montana.....	8,170	3,861	17,797	85.1	7,773	3,528	13,736	99.6
Utah.....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
Pacific Division.....	55,725	25,480	103,548	96.5	53,644	24,507	92,093	103.1
Washington.....	15,696	7,076	27,481	101.0	15,183	6,833	27,481	96.4
Oregon.....	9,398	4,238	20,025	83.0	9,195	4,122	20,025	79.8
California and Hawaii.....	30,631	14,166	56,042	99.1	29,266	13,552	44,587	117.8

¹Capacity as reported for December of each year.²Estimated annual capacity is obtained by multiplying daily capacity by the number of workdays during the year, 255 for 1977 and 258 for 1976. This figure is calculated on the basis of a 5 day week with allowances for the following holiday unless such holidays fall on Saturday: January 1, Memorial Day, July 4, Labor Day, Thanksgiving Day and December 25.

Table 2A. QUANTITY OF WHEAT GROUND FOR FLOUR AND WHEAT FLOUR PRODUCTION, BY DIVISIONS AND STATES BY MONTH-1976 REVISED

(Wheat ground for flour in thousands of bushels; wheat flour produced in thousands of hundredweight)

Geographic area	December		November		October		September		August		July	
	Wheat ground for flour	Wheat flour production	Wheat ground for flour	Wheat flour production	Wheat ground for flour	Wheat flour production	Wheat ground for flour	Wheat flour production	Wheat ground for flour	Wheat flour production	Wheat ground for flour	Wheat flour production
United States, total.....	49,691	22,058	50,273	22,297	54,225	24,090	55,294	24,572	57,825	25,715	52,145	23,063
Middle Atlantic.....	6,409	2,883	6,589	2,969	7,117	3,201	6,998	3,132	7,008	3,126	6,452	2,865
New York.....	4,952	2,234	4,976	2,253	5,646	2,543	5,499	2,465	5,462	2,443	5,224	2,321
North Central.....	27,468	11,967	27,789	12,278	30,354	13,455	31,374	13,901	32,907	14,548	29,178	12,860
Ohio.....	2,869	1,242	3,182	1,369	3,493	1,507	3,412	1,476	3,383	1,463	3,034	1,312
Indiana.....	1,263	529	1,228	518	1,438	608	1,200	510	1,420	605	1,325	560
Illinois.....	2,791	1,224	2,875	1,260	3,113	1,351	3,114	1,348	3,277	1,421	2,699	1,154
Michigan.....	744	326	902	350	863	375	847	371	804	350	735	315
Minnesota.....	5,724	2,626	5,718	2,604	6,264	2,869	6,298	2,884	6,656	3,010	5,584	2,514
Iowa.....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	365
Missouri.....	4,315	1,912	4,241	1,889	4,674	2,078	4,845	2,145	4,881	2,169	4,604	2,043
Nebraska.....	2,003	871	2,042	885	2,066	889	2,189	923	2,424	1,046	2,066	886
Kansas.....	5,981	2,689	5,874	2,636	6,627	2,975	7,552	3,392	8,039	3,594	7,476	3,238
South Atlantic.....	2,756	1,421	3,150	1,397	3,103	1,393	3,155	1,405	3,397	1,511	3,079	1,351
East South Central.....	2,701	1,150	2,500	1,078	2,697	1,148	2,615	1,118	2,713	1,164	2,551	1,102
Tennessee.....	2,052	871	1,937	840	2,104	898	1,995	854	2,094	899	1,977	855
West South Central.....	3,106	1,366	3,121	1,376	3,243	1,429	3,531	1,558	3,872	1,713	3,575	1,578
Oklahoma.....	1,274	578	1,127	511	1,228	559	1,475	670	1,692	770	1,597	722
Texas.....	1,320	558	1,426	610	1,387	591	1,444	618	1,590	681	1,417	607
Mountain.....	2,793	1,234	2,673	1,180	2,833	1,250	2,923	1,313	3,025	1,393	2,929	1,298
Montana.....	644	292	676	306	713	325	720	324	821	372	671	309
Utah.....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
Pacific.....	4,458	2,037	4,451	2,019	4,878	2,214	4,698	2,145	4,903	2,260	4,381	2,009
Washington.....	1,241	559	1,206	534	1,500	667	1,393	620	1,331	600	1,312	591
Oregon.....	749	334	740	331	802	363	756	336	870	393	660	293
California and Hawaii.....	2,468	1,144	2,505	1,154	2,576	1,184	2,549	1,189	2,702	1,267	2,409	1,125
Geographic area	June		May		April		March		February		January	
	Wheat ground for flour	Wheat flour production	Wheat ground for flour	Wheat flour production	Wheat ground for flour	Wheat flour production	Wheat ground for flour	Wheat flour production	Wheat ground for flour	Wheat flour production	Wheat ground for flour	Wheat flour production
United States, total.....	50,430	22,328	49,488	22,127	49,946	22,381	51,695	23,076	47,296	21,078	49,976	22,292
Middle Atlantic.....	6,540	2,912	6,406	2,858	5,866	2,616	6,503	2,889	5,958	2,636	6,150	2,709
New York.....	5,131	2,287	4,983	2,226	4,538	2,027	5,019	2,240	4,660	2,072	4,725	2,097
North Central.....	27,924	12,311	27,549	12,275	28,187	12,580	28,991	12,892	26,624	11,798	27,611	12,186
Ohio.....	2,726	1,187	2,207	950	2,978	1,306	3,107	1,355	2,800	1,225	3,015	1,315
Indiana.....	1,248	520	1,292	548	1,186	504	1,421	603	1,120	478	1,361	571
Illinois.....	2,964	1,295	2,865	1,275	2,789	1,235	3,099	1,375	2,806	1,237	2,689	1,187
Michigan.....	744	322	741	325	739	328	809	358	704	310	742	325
Minnesota.....	5,681	2,554	5,595	2,527	5,730	2,585	6,015	2,702	5,880	2,656	5,835	2,620
Iowa.....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
Missouri.....	4,304	1,923	4,424	1,989	4,266	1,924	4,198	1,899	3,875	1,744	4,184	1,874
Nebraska.....	1,917	821	1,899	826	1,900	823	2,114	917	1,764	762	1,857	803
Kansas.....	6,671	2,994	6,855	3,100	6,904	3,125	6,379	2,870	5,994	2,649	6,129	2,775
South Atlantic.....	2,889	1,267	2,959	1,361	3,026	1,360	2,993	1,341	2,888	1,307	2,964	1,431
East South Central.....	2,591	1,127	2,518	1,103	2,411	1,115	2,657	1,222	2,456	1,125	2,498	1,149
Tennessee.....	1,987	866	1,924	844	1,918	843	2,118	928	1,986	868	2,006	879
West South Central.....	3,474	1,569	3,297	1,470	3,384	1,510	3,205	1,427	2,944	1,311	3,058	1,358
Oklahoma.....	1,502	(D)	1,417	(D)	1,499	(D)	1,384	(D)	1,127	(D)	1,223	(D)
Texas.....	1,375	580	1,361	586	1,333	573	1,317	570	1,331	579	1,298	560
Mountain.....	2,878	1,247	2,570	1,139	2,623	1,158	2,768	1,225	2,471	1,093	3,125	1,382
Montana.....	616	278	589	271	590	267	594	270	542	245	597	269
Utah.....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
Pacific.....	4,134	1,895	4,189	1,921	4,449	2,042	4,578	2,080	3,955	1,808	4,570	2,077
Washington.....	1,123	511	1,128	515	1,189	545	1,292	581	1,090	490	1,378	620
Oregon.....	704	315	714	319	845	379	783	346	682	310	890	403
California and Hawaii.....	2,307	1,069	2,347	1,087	2,415	1,118	2,503	1,153	2,183	1,008	2,302	1,054

(D) Withheld to avoid disclosing figures for individual companies.

Table 2B. QUANTITY OF WHEAT GROUND FOR FLOUR AND WHEAT FLOUR PRODUCTION, BY DIVISIONS AND STATES BY MONTH-1977 REVISED
(Wheat ground for flour in thousands of bushels; wheat flour production in thousands of hundredweight)

Geographic area	December		November		October		September		August		July	
	Wheat ground for flour	Wheat flour production	Wheat ground for flour	Wheat flour production	Wheat ground for flour	Wheat flour production	Wheat ground for flour	Wheat flour production	Wheat ground for flour	Wheat flour production	Wheat ground for flour	Wheat flour production
United States, total.....	52,106	23,363	53,159	23,785	52,352	23,396	52,244	23,381	54,844	24,419	46,149	20,566
Middle Atlantic.....	7,143	3,158	7,207	3,426	7,017	3,144	7,328	3,295	7,302	3,265	5,992	2,691
New York.....	5,677	2,507	5,583	2,499	5,475	2,461	5,836	2,637	5,722	2,572	4,775	2,153
North Central.....	27,338	12,305	28,770	12,329	29,153	12,980	28,127	12,603	29,646	13,194	25,205	11,235
Ohio.....	3,195	1,398	2,985	1,303	3,155	1,381	2,848	1,246	3,121	1,354	2,537	1,085
Indiana.....	1,272	549	1,225	537	1,387	599	1,320	584	1,159	497	1,201	510
Illinois.....	2,594	1,148	3,215	1,424	3,254	1,435	3,193	1,416	3,460	1,522	2,666	1,158
Michigan.....	803	349	563	387	895	398	832	367	781	342	692	303
Minnesota.....	5,447	2,491	5,930	2,703	6,147	2,820	6,066	2,771	6,382	2,923	5,466	2,516
Iowa.....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
Missouri.....	4,298	1,947	4,989	2,233	4,431	1,978	4,016	1,800	4,332	1,928	3,976	1,757
Nebraska.....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	1,881	833	1,486	656
Kansas.....	6,736	3,086	6,448	3,305	6,554	2,949	6,541	2,951	6,677	2,983	5,727	2,602
South Atlantic.....	4,182	1,831	3,318	1,654	2,966	1,331	3,189	1,379	3,484	1,500	2,790	1,198
East South Central.....	2,744	1,195	2,666	1,155	2,623	1,137	2,713	1,177	2,811	1,207	2,417	1,040
Tennessee.....	2,196	961	2,147	931	2,068	898	2,113	919	2,164	928	1,846	802
West South Central.....	3,431	1,548	3,405	1,653	3,252	1,455	3,239	1,448	3,528	1,586	2,990	1,343
Oklahoma.....	1,301	598	1,367	630	1,198	550	1,228	560	1,350	617	1,285	585
Texas.....	1,355	606	1,495	664	1,464	647	1,444	638	1,602	716	1,274	569
Mountain.....	2,981	1,353	3,044	1,381	2,805	1,267	2,968	1,337	3,017	1,354	2,628	1,177
Montana.....	704	331	772	367	673	319	770	363	763	359	581	274
Utah.....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
Pacific.....	4,287	1,973	4,749	2,187	4,536	2,082	4,680	2,142	5,056	2,313	4,127	1,882
Washington.....	1,123	510	1,321	597	1,261	570	1,282	579	1,394	627	1,133	511
Oregon.....	657	302	722	329	707	319	784	357	867	395	662	295
California and Hawaii.....	2,507	1,161	2,706	1,261	2,568	1,193	2,614	1,206	2,795	1,291	2,332	1,076
June		May		April		March		February		January		
	Wheat ground for flour	Wheat flour production	Wheat ground for flour	Wheat flour production	Wheat ground for flour	Wheat flour production	Wheat ground for flour	Wheat flour production	Wheat ground for flour	Wheat flour production	Wheat ground for flour	Wheat flour production
United States, total.....	49,072	21,769	49,688	22,121	49,184	21,877	57,635	25,787	50,840	22,716	50,852	22,604
Middle Atlantic.....	6,580	2,957	6,404	2,881	5,880	2,657	7,319	3,318	5,914	2,672	5,609	2,517
New York.....	5,213	2,353	4,895	2,211	4,500	2,043	5,782	2,629	4,489	2,038	4,228	1,905
North Central.....	26,606	11,764	27,047	12,019	27,493	12,193	31,708	14,176	28,566	12,778	28,732	12,795
Ohio.....	2,474	1,052	2,708	1,169	2,494	1,080	3,306	1,437	2,515	1,081	2,629	1,141
Indiana.....	1,291	547	1,064	454	1,307	547	1,472	626	1,231	516	1,236	520
Illinois.....	2,975	1,295	3,053	1,338	2,913	1,279	3,298	1,445	3,078	1,353	2,963	1,297
Michigan.....	765	337	761	333	770	338	907	398	696	305	682	296
Minnesota.....	5,715	2,602	5,329	2,428	5,568	2,546	6,420	2,958	5,936	2,748	5,966	2,730
Iowa.....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
Missouri.....	4,189	1,862	4,415	1,960	4,388	1,958	5,054	2,360	4,739	2,117	4,675	2,081
Nebraska.....	1,714	754	1,893	839	1,712	765	1,997	894	1,929	867	1,768	787
Kansas.....	5,892	2,627	6,173	2,768	6,826	3,066	7,391	3,330	6,623	2,985	6,936	3,117
South Atlantic.....	3,110	1,332	3,228	1,390	2,833	1,276	3,556	1,534	3,073	1,326	2,886	1,235
East South Central.....	2,628	1,136	2,573	1,119	2,441	1,056	2,915	1,267	2,516	1,073	2,457	1,048
Tennessee.....	2,109	915	1,979	865	1,866	808	2,237	974	1,933	823	1,916	817
West South Central.....	3,344	1,490	3,262	1,463	3,279	1,421	3,728	1,666	3,518	1,566	3,531	1,559
Oklahoma.....	1,358	615	1,429	647	1,445	657	1,597	724	1,467	666	1,486	667
Texas.....	1,413	622	1,261	561	1,251	494	1,472	645	1,497	649	1,531	650
Mountain.....	2,564	1,153	2,592	1,162	2,688	1,205	3,033	1,362	2,583	1,165	2,785	1,242
Montana.....	552	266	612	288	633	300	784	371	659	316	667	307
Utah.....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
Pacific.....	4,240	1,937	4,582	2,087	4,570	2,069	5,376	2,464	4,670	2,136	4,852	2,208
Washington.....	1,096	497	1,234	560	1,371	614	1,646	743	1,387	623	1,448	645
Oregon.....	692	310	724	318	713	324	1,004	451	876	397	990	441
California and Hawaii.....	2,452	1,130	2,624	1,209	2,486	1,131	2,726	1,270	2,407	1,116	2,414	1,122

(D) Withheld to avoid disclosing figures for individual companies.

Flour Milling Products



U.S. Department of Commerce
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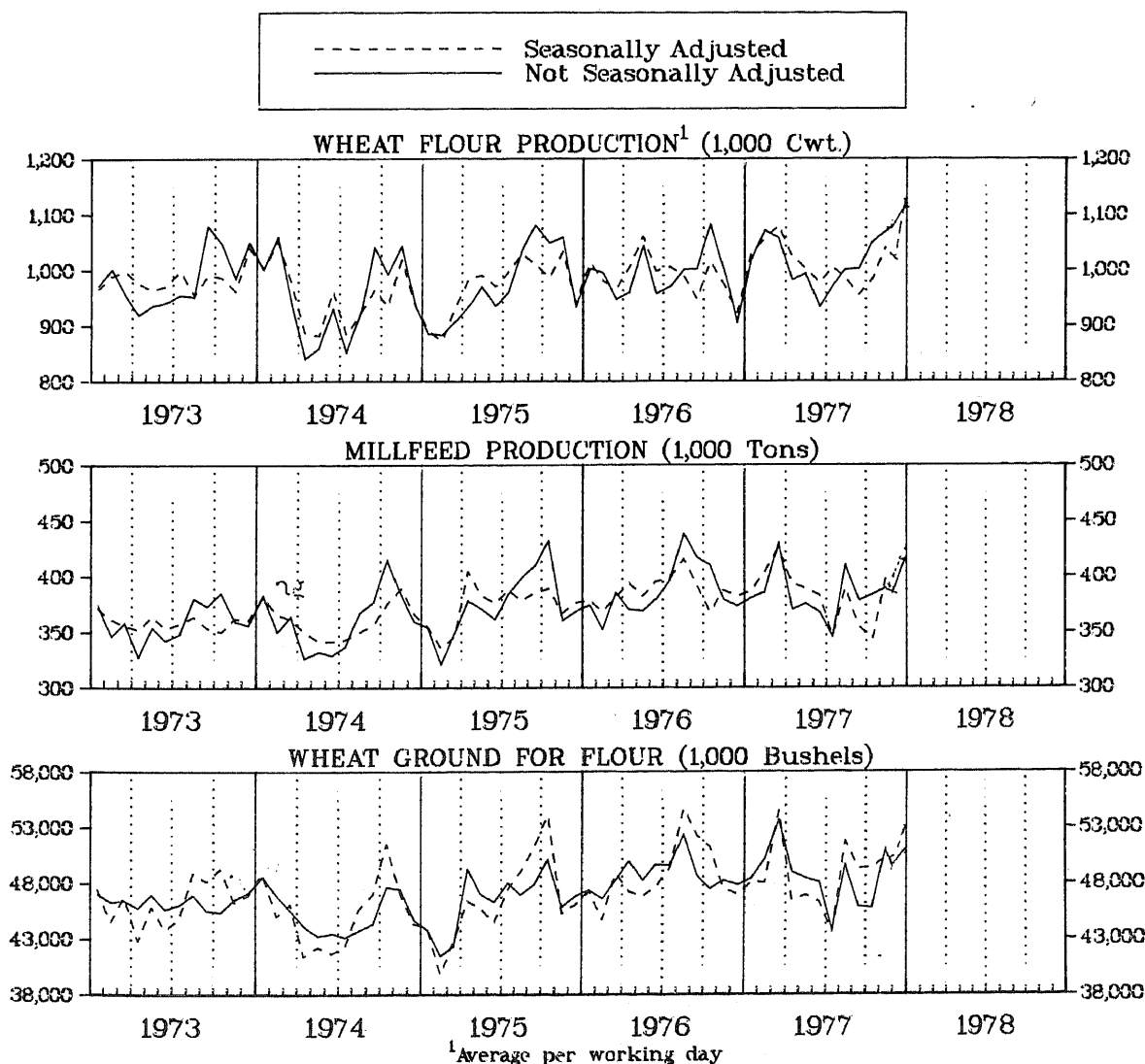
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The statistics in this publication are based on a survey of manufacturers and represent total U.S. production of flour milling products. Estimates are included for companies whose reports were not received in time for tabulation. A more com-

plete description of this survey appears on page 5. An annual current industrial report is published in this series. The annual report includes all the months for the current and previous years and incorporates all known revisions in the series.

WHEAT FLOUR MILLING: 1973 TO 1978



Address inquiries concerning these figures to U.S. Department of Commerce, Bureau of the Census, Industry Division, Washington, D.C. 20233, or call Geraldine Bynum, (301) 763-7807.

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Table 1A.--SUMMARY OF WHEAT FLOUR MILLING: 1976 TO 1978

(Seasonally adjusted)

Month and year	Wheat flour production average per working day ¹ (1,000 cwt.)	Millfeed production (1,000 tons)	Wheat ground for flour (1,000 bushels)
1978			
January.....	1,045	389	48,038
1977			
December.....	1,137	421	53,169
November.....	1,039	398	51,034
October.....	983	343	45,796
September.....	954	355	45,821
August.....	985	389	49,628
July.....	1,004	346	43,693
June.....	976	382	48,088
May.....	1,002	389	48,419
April.....	1,024	393	48,949
March.....	1,079	426	53,682
February.....	1,057	404	50,128
January.....	1,027	387	48,374
1976			
December.....	922	382	47,848
November.....	974	387	48,209
October.....	1,014	368	47,466
September.....	946	392	48,672
August.....	988	415	52,331
July.....	1,005	398	49,569
June.....	998	395	49,630
May.....	1,060	382	48,254
April.....	1,005	394	49,939
March.....	966	381	48,218
February.....	980	368	46,584
January.....	1,012	378	47,346

See footnotes at end of table 1B.

Table 1B.--SUMMARY OF WHEAT FLOUR MILLING: 1976 TO 1978

(Not seasonally adjusted)

Month and year	Wheat flour production (1,000 cwt.)		Millfeed production (tons)	Wheat ground for flour (1,000 bushels)	Wheat flour mill stocks ² (1,000 cwt.)	Daily 24-hour capacity in wheat flour ² (1,000 cwt.)	Wheat flour produced as percent of capacity	Flour extraction rate ³ (percent)
	Average per working day ¹	Calendar month total						
1978								
January.....	1,031	21,661	381,172	48,474	(NA)	1,017	101.4	74.5
1977								
December.....	1,112	23,363	410,169	52,106	4,160	1,017	109.4	74.7
November.....	1,069	22,445	389,311	50,166	(NA)	968	110.4	74.6
October.....	1,050	22,054	382,730	49,360	(NA)	968	108.5	74.5
September.....	1,002	22,039	378,118	49,258	3,537	968	103.4	74.6
August.....	1,001	23,023	410,232	51,712	(NA)	957	104.6	74.2
July.....	970	19,393	344,584	43,518	(NA)	957	101.3	74.3
June.....	933	20,529	366,513	46,261	4,167	957	97.5	74.0
May.....	993	20,861	375,128	46,870	(NA)	976	101.8	74.2
April.....	982	20,632	369,798	46,402	(NA)	976	100.7	74.1
March.....	1,057	24,321	430,120	54,434	4,248	976	108.3	74.5
February.....	1,071	21,425	385,212	48,023	(NA)	990	108.2	74.4
January.....	1,015	21,320	380,273	48,035	(NA)	990	102.5	74.0
1976								
December.....	905	20,804	372,844	46,931	4,334	990	91.4	73.9
November.....	1,001	21,031	379,784	47,486	(NA)	998	100.3	73.8
October.....	1,082	22,723	410,072	51,216	(NA)	998	108.4	73.9
September.....	1,053	23,178	417,142	52,225	3,621	998	105.5	73.4
August.....	1,103	24,257	437,548	54,634	(NA)	990	111.4	74.0
July.....	989	21,751	395,596	49,272	(NA)	990	100.1	73.6
June.....	957	21,059	378,582	47,645	3,923	990	96.7	73.7
May.....	1,044	20,871	369,318	46,758	(NA)	997	104.7	74.4
April.....	960	21,113	369,372	47,192	(NA)	997	96.3	74.5
March.....	947	21,771	384,578	48,845	4,510	997	94.9	74.3
February.....	995	19,891	351,557	44,674	(NA)	991	100.4	74.2
January.....	1,002	21,034	373,719	47,204	(NA)	991	101.1	74.3

Note: Data include estimates for small mills. The data shown for 1976 and 1977 exclude a number of plants that began operations during this period. These companies account for approximately 5-8 percent of our 1977 estimates. Revised monthly data will be shown in the annual summary to be released in early 1978. Data for January 1978 will include the production for these companies.

(NA) Not available.

¹The number of working days per month is computed on the basis of a 5-day week with allowances for the following holidays: January 1, Memorial Day, Independence Day, Thanksgiving Day, and December 25.

²Collected quarterly.

³Wheat flour production as compared with amount of wheat ground.

Table 1C.--COMBINED FINAL SEASONAL AND TRADING DAY FACTORS: 1976 TO 1978

Flour production	January	February	March	April	May	June	July	August	September	October	November	December
ONE YEAR AHEAD--1978												
Average per day.....	98.7	101.2	98.1	96.1	99.4	95.5	96.6	101.7	104.6	106.8	102.9	97.8
Millfeed production.....	98.0	95.3	101.0	94.3	96.4	96.0	99.9	105.3	106.6	111.7	97.8	95.5
Wheat grinding.....	99.1	95.8	101.4	94.9	96.8	96.2	99.8	104.1	107.6	107.9	98.3	98.0
1977												
Average production.....	98.8	101.3	98.0	95.9	99.1	95.6	96.6	101.6	105.0	106.8	102.9	97.8
Millfeed production.....	98.3	95.4	101.0	94.1	96.5	96.0	99.8	105.4	106.6	111.7	97.8	97.5
Wheat grinding.....	99.3	95.8	101.4	94.8	96.8	96.2	99.6	104.2	107.5	107.9	98.3	98.0
1976												
Average production.....	99.0	101.5	98.0	95.5	98.5	95.9	96.5	101.3	105.9	106.7	102.8	98.2
Millfeed production.....	98.9	95.6	101.0	93.9	96.6	95.9	99.5	105.5	106.5	111.5	97.9	97.6
Wheat grinding.....	99.7	95.9	101.3	94.5	96.9	96.0	99.4	104.4	107.3	107.9	98.5	98.1

Table 2.--QUANTITY OF DURUM WHEAT AND RYE FLOUR PRODUCTION, GRAIN CONSUMPTION, MILL STOCKS, AND CAPACITY

Product code	Description of item	Unit of Measure	January 1978	December 1977	January 1977
Durum wheat (included in table 1 data):					
0011173	Durum wheat ground.....	M bu.....	3,419	3,214	3,278
2041153	Straight semolina durum flour.....	M cwt.....	1,505	1,427	1,466
2041155	Blended semolina durum flour.....	..do.....	(D)	(D)	(D)
Rye:					
0011951	Rye ground for flour.....	M bu.....	308	334	305
2041611	Rye flour production.....	M cwt.....	143	153	140
2041618	Rye millfeed production.....	Tons.....	1,808	1,788	1,751
2041611	Rye flour stocks ¹	M cwt.....	(NA)	24	(NA)
	24 hour capacity ¹.....	..do.....	10	10	10

Note: Data include estimates for small mills. Detail may not add to total due to independent rounding. These data exclude all flour blended by macaroni and spaghetti manufacturers, etc., as such activities are not within scope of this survey. Only mills engaged in milling flour or meal are included in this survey.

(D) Withheld to avoid disclosure of figures for individual companies. (NA) Not available.

¹Collected quarterly.

Table 3.--QUANTITY OF WHEAT GROUND FOR FLOUR AND WHEAT FLOUR PRODUCTION, BY DIVISIONS AND STATES

(Wheat ground for flour in thousands of bushels; wheat production in thousands of hundredweight)

Geographic area	January 1978		December 1977		January 1977	
	Wheat ground for flour	Wheat flour production	Wheat ground for flour	Wheat flour production	Wheat ground for flour	Wheat flour production
United States, total.....	48,474	21,661	52,106	23,363	44,674	21,469
Middle Atlantic.....	6,088	2,694	7,143	3,158	5,571	2,488
New York.....	4,905	2,162	5,677	2,507	4,660	2,038
North Central.....	25,766	11,979	27,338	12,305	25,447	12,232
Ohio.....	2,391	1,033	3,195	1,398	2,800	1,081
Indiana.....	1,146	497	1,272	549	1,120	516
Illinois.....	2,593	1,161	2,594	1,148	2,806	1,353
Michigan.....	735	322	803	349	704	305
Minnesota.....	5,800	2,646	5,447	2,491	5,880	2,748
Iowa.....	(D)	(D)	(D)	(D)	(D)	(D)
Missouri.....	4,382	1,978	4,298	1,947	3,875	2,117
Nebraska.....	(D)	(D)	(D)	(D)	1,356	661
Kansas.....	6,386	2,889	6,736	3,086	5,225	2,607
South Atlantic.....	2,853	1,229	4,182	1,831	2,475	1,122
East South Central.....	2,673	1,101	2,744	1,195	2,456	1,073
Tennessee.....	2,127	869	2,196	961	1,986	823
West South Central.....	3,277	1,489	3,431	1,548	2,652	1,425
Oklahoma.....	1,396	645	1,301	598	1,127	666
Texas.....	1,418	641	1,355	606	1,331	649
Mountain.....	2,676	1,214	2,981	1,353	2,471	1,165
Montana.....	619	287	704	331	542	316
Utah.....	(D)	(D)	(D)	(D)	(D)	(D)
Pacific.....	4,229	1,955	4,287	1,973	3,602	1,964
Washington.....	1,150	517	1,123	510	1,090	623
Oregon.....	692	319	657	302	682	402
California and Hawaii.....	2,387	1,119	2,507	1,161	1,830	939

Note: Detail may not add to total due to independent rounding.

(D) Withheld to avoid disclosure of figures for individual companies.

Table 4.--EXPORTS OF WHEAT AND WHEAT FLOUR

Country to which exported	December 1977	November 1977	12 months through December 1977
WHEAT FLOUR, EXCEPT MEAL AND GROATS, DONATED FOR RELIEF OR CHARITY (0460110) (1,000 cwt.)			
Total.....	274	148	3,615
Egypt.....	29	-	809
Guatemala.....	-	-	85
Colombia.....	-	2	95
Ecuador.....	-	-	6
Brazil.....	4	-	9
Israel.....	-	-	105
India.....	1	6	59
Chile.....	48	25	237
Sri Lanka (Ceylon).....	-	-	112
Philippine Republic.....	30	-	200
Morocco.....	96	62	718
Other.....	67	53	1,180
WHEAT FLOUR, WHOLLY U.S. WHEAT, EXCEPT DURUM FLOUR AND SEMOLINA (0460120) (1,000 cwt.)			
Total.....	1,219	762	17,886
Nicaragua.....	2	5	31
Jamaica.....	268	6	495
Brazil.....	-	-	22
Iceland.....	3	7	75
Jordan.....	22	-	132
Saudi Arabia.....	651	339	4,884
Sri Lanka (Ceylon).....	10	13	4,396
Egypt.....	-	-	5,809
Philippine Republic.....	-	-	13
Korean Republic.....	-	-	1
Morocco.....	-	-	-
Other.....	263	392	2,028
WHEAT, INCLUDING SPELT OR MESLIN, UNMILLED, NOT DONATED FOR RELIEF OR CHARITY (0410020) (1,000 bu.)			
Total.....	86,691	56,667	863,920
U.S.S.R.....	14,201	10,560	110,838
Venezuela.....	2,713	1,505	24,249
Peru.....	-	146	15,567
Brazil.....	7,210	2,605	25,772
Portugal.....	-	-	19,576
Iran.....	2,317	1,324	45,083
Indonesia.....	1,448	1,345	16,611
Korean Republic.....	8,747	525	65,993
China (Taiwan).....	3,955	1,396	20,197
Japan.....	1,277	2,611	121,808
Egypt.....	2,363	2,624	49,044
Nigeria.....	2,276	1,580	24,739
Other.....	40,184	30,446	324,443

Note: Data in this table are taken from Foreign Trade publication FT410, U.S. Exports. The Schedule B codes are as follows: 0460110, wheat flour (except meal and groats); 0460120, wheat flour (wholly of U.S. wheat, except durum flour and semolina); 0410020, wheat, including spelt or meslin, unmilled, not donated for relief or charity.

- Represents zero.

DESCRIPTION OF SURVEY

Scope of Survey—This survey covers firms engaged in the production of wheat and rye flour. The reporting panel consists of mills with a daily capacity of over 400 sacks of flour.

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Seasonal Adjustment—This report presents seasonally adjusted data in table 1A for selected series shown in table 1B. The data were seasonally adjusted using the X-11 variant of the Bureau of the Census method II seasonal adjustment program. This seasonal adjustment program is a ratio-to-moving average method. The seasonal adjustment program largely eliminates the effect of seasonal variations (intra-year variations repeated constantly from year to year) within the series. The seasonally

adjusted data usually provide a better measure than the not seasonally adjusted (original) data of the month-to-month variations which are due to factors other than seasonal pattern.

EXPLANATION OF TERMS

Units of Quantity—Grain ground is measured in bushels of 60 pounds for wheat, and 56 pounds for rye. Flour production is measured in sacks of 100 pounds.

Capacity—Based on replies to the question, "What is the maximum quantity of flour that can be produced in your mill in one day if operated for 24 hours?", the capacity of idle mills is included until the mills are reported to be destroyed, dismantled, or abandoned.

Grain—Represents the purchased weight of grain ground, including the weight of foreign material (dockage).

Millfeed—Includes bran, middlings, shorts, and other milling by products intended principally for use as feed materials.

Wheat Flour—Includes whole wheat flour, farina, industrial flour, and durum flour.

Stocks of Flour (quarterly)—Represents mill stocks in all positions, sold and unsold.

RELATED REPORTS

An annual current industrial report is published in this series. The annual report summarizes monthly figures and incorporates all known revisions in the series for both current and previous year, thus, providing a single reference copy to replace the monthly publications. This annual summary provides additional information on the history of this survey.

The Bureau of the Census also publishes reports on related products as follows:

Series	Frequency	Title
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M3-1	Monthly	Manufacturers' Shipments, Inventories, and Orders
M20C	Monthly	Confectionery, Including Chocolate Products

Foreign Trade Reports

FT-410	Monthly	U.S. Exports—Schedule B—Commodity by Country
FT-135	Monthly	U.S. General Imports—Schedule A—Commodity by Country

CONTACTS FOR DATA USERS

Subject Area	Contact	Phone Number
Current Industrial Report M20A	Geraldine Bynum	(301) 763-7807
Foreign Trade publications	Juanita Noone	(301) 763-5140
To order a Census publication	Daisy Williams	(301) 763-7472
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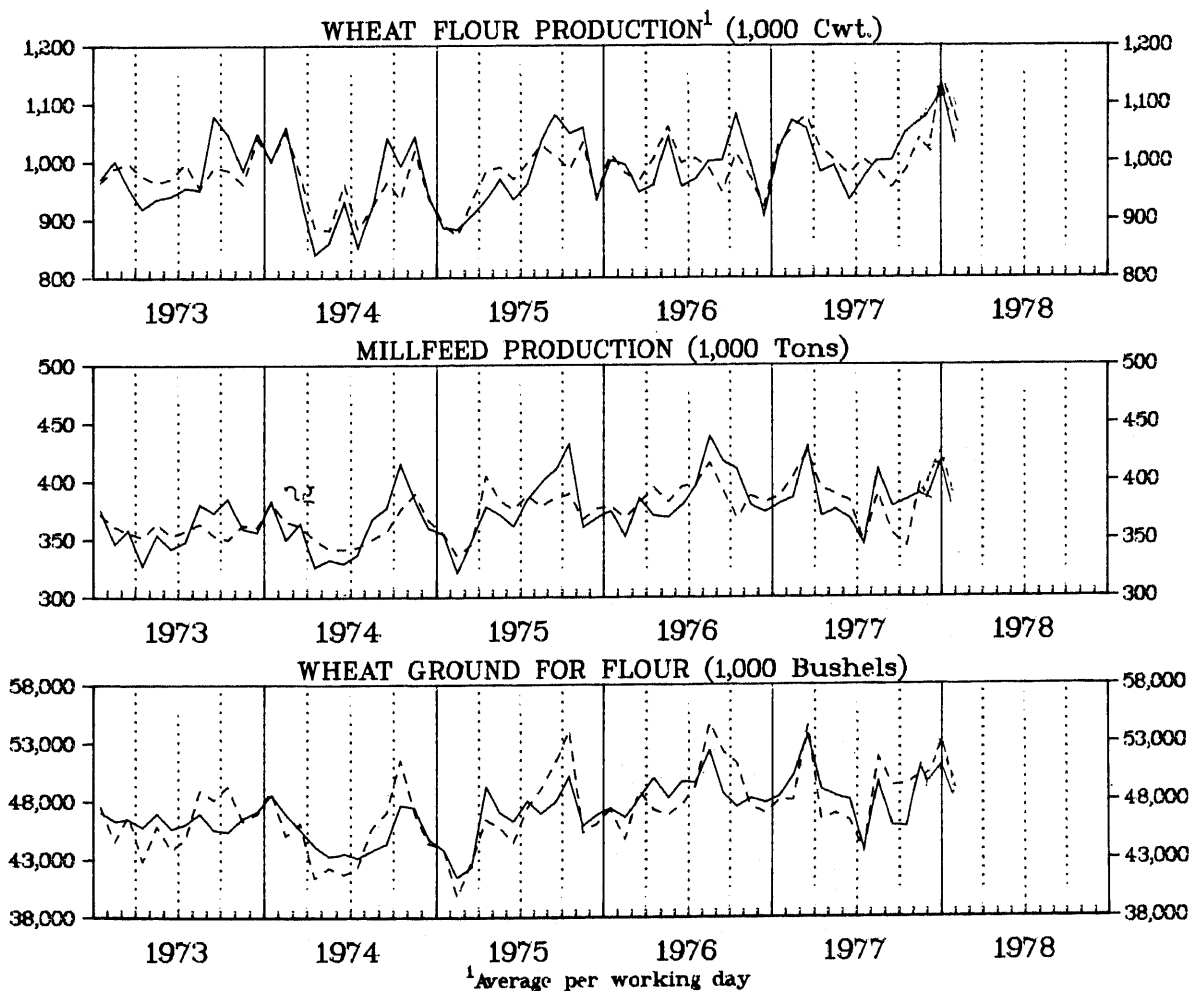
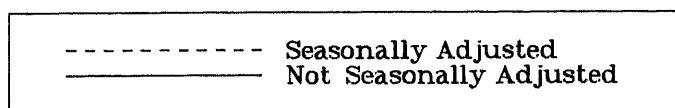
FEBRUARY 1978

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The statistics in this publication are based on a survey of manufacturers and represent total U.S. production of flour milling products. Estimates are included for companies whose reports were not received in time for tabulation. A more com-

plete description of this survey appears on page 5. An annual current industrial report is published in this series. The annual report includes all the months for the current and previous years and incorporates all known revisions in the series.

WHEAT FLOUR MILLING: 1973 TO 1978



Address inquiries concerning these figures to U.S. Department of Commerce, Bureau of the Census, Industry Division, Washington, D.C. 20233, or call Geraldine Bynum, (301) 763-7807.

For sale by the Subscriber Services Section (Publications), Bureau of the Census, Washington, D.C. 20233, or any U.S. Department of Commerce district office. Postage stamps not acceptable; currency submitted at sender's risk. Remittances from foreign countries must be by international money order or by a draft on a U.S. bank. Price 25 cents per copy, \$3.30 per year.

Table 1A.--SUMMARY OF WHEAT FLOUR MILLING: 1976 TO 1978

(Seasonally adjusted)

Month and year	Wheat flour production average per working day ¹ (1,000 cwt.)	Millfeed production (1,000 tons)	Wheat ground for flour (1,000 bushels)
1978			
February.....	1,055	394	50,320
January.....	1,061	388	48,870
1977			
December.....	1,137	421	53,169
November.....	1,039	398	51,034
October.....	983	343	45,796
September.....	954	355	45,821
August.....	985	389	49,628
July.....	1,004	346	43,693
June.....	976	382	48,088
May.....	1,002	389	48,419
April.....	1,024	393	48,949
March.....	1,079	426	53,682
February.....	1,057	404	50,128
January.....	1,027	387	48,374
1976			
December.....	922	382	47,848
November.....	974	387	48,209
October.....	1,014	368	47,466
September.....	946	392	48,672
August.....	988	415	52,331
July.....	1,005	398	49,569
June.....	998	395	49,630
May.....	1,060	382	48,254
April.....	1,005	394	49,939
March.....	966	381	48,218
February.....	980	368	46,584

See footnotes at end of table 1B.

Table 1B.--SUMMARY OF WHEAT FLOUR MILLING: 1976 TO 1978

(Not seasonally adjusted)								
Month and year	Wheat flour production (1,000 cwt.)		Millfeed production (tons)	Wheat ground for flour (1,000 bushels)	Wheat flour mill stocks ² (1,000 cwt.)	Daily 24-hour capacity in wheat flour ² (1,000 cwt.)	Wheat flour produced as percent of capacity	Flour extraction rate ³ (percent)
	Average per working day ¹	Calendar month total						
1978								
February.....	1,041	21,328	375,078	48,207	(NA)	1,017	102.4	74.3
January.....	1,038	21,787	380,717	48,430	(NA)	1,017	102.2	74.9
1977								
December.....	1,112	23,363	410,169	52,106	4,160	1,017	109.4	74.7
November.....	1,069	22,445	389,311	50,166	(NA)	968	110.4	74.6
October.....	1,050	22,054	382,730	49,360	(NA)	968	108.5	74.5
September.....	1,002	22,039	378,118	49,258	3,537	968	103.4	74.6
August.....	1,001	23,023	410,232	51,712	(NA)	957	104.6	74.2
July.....	970	19,393	344,584	43,518	(NA)	957	101.3	74.3
June.....	933	20,529	366,513	46,261	4,167	957	97.5	74.0
May.....	993	20,861	375,128	46,870	(NA)	976	101.8	74.2
April.....	982	20,632	369,798	46,402	(NA)	976	100.7	74.1
March.....	1,057	24,321	430,120	54,434	4,248	976	108.3	74.5
February.....	1,071	21,425	385,212	48,023	(NA)	990	108.2	74.4
January.....	1,015	21,320	380,273	48,035	(NA)	990	102.5	74.0
1976								
December.....	905	20,804	372,844	46,931	4,334	990	91.4	73.9
November.....	1,001	21,031	379,784	47,486	(NA)	998	100.3	73.8
October.....	1,082	22,723	410,072	51,216	(NA)	998	108.4	73.9
September.....	1,053	23,178	417,142	52,225	3,621	998	105.5	73.4
August.....	1,103	24,257	437,548	54,634	(NA)	990	111.4	74.0
July.....	989	21,751	395,596	49,272	(NA)	990	100.1	73.6
June.....	957	21,059	378,582	47,645	3,923	990	96.7	73.7
May.....	1,044	20,871	369,318	46,758	(NA)	997	104.7	74.4
April.....	960	21,113	369,972	47,192	(NA)	997	96.3	74.5
March.....	967	21,771	384,578	48,845	4,510	997	94.9	74.3
February.....	995	19,891	351,557	46,674	(NA)	991	100.4	74.2

Note: Data include estimates for small mills. The data shown for 1976 and 1977 exclude a number of plants that began operations during this period. These companies account for approximately 5-8 percent of our 1977 estimates. Revised monthly data will be shown in the annual summary to be released in early 1978. Data for January 1978 will include the production for these companies.

(NA) Not available.

¹The number of working days per month is computed on the basis of a 5-day week with allowances for the following holidays: January 1, Memorial Day, Independence Day, Thanksgiving Day, and December 25.

²Collected quarterly.

³Wheat flour production as compared with amount of wheat ground.

Table 2.--QUANTITY OF DURUM WHEAT AND RYE FLOUR PRODUCTION, GRAIN CONSUMPTION, MILL STOCKS, AND CAPACITY

Product code	Description of item	Unit of measure	February 1978	January 1978	February 1977
	DURUM WHEAT (Included in table 1 data):				
0011173	Durum wheat ground.....	M bu.....	3,236	3,454	3,548
2041153	Straight semolina durum flour.....	M cwt.....	1,438	1,506	1,511
2041155	Blended semolina durum flour.....	..do.....	(D)	(D)	(D)
	RYE:				
0011951	Rye ground for flour.....	M bu.....	304	322	302
2041611	Rye flour production.....	M cwt.....	136	147	130
2041618	Rye millfeed production....	Tons.....	1,772	1,802	1,410
2041611	Rye flour stocks ¹	M cwt.....	(NA)	(NA)	(NA)
	24 hour capacity ¹.....	..do.....	10	10	10

Note: Data include estimates for small mills. Detail may not add to total due to independent rounding. These data exclude all flour blended by macaroni and spaghetti manufacturers, etc., as such activities are not within scope of this survey. Only mills engaged in milling flour or meal are included in this survey.

(D) Withheld to avoid disclosure of figures for individual companies.

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Table 3.--QUANTITY OF WHEAT GROUND FOR FLOUR AND WHEAT FLOUR PRODUCTION, BY DIVISIONS AND STATES

(Wheat ground for flour in thousands of bushels; wheat production in thousands of hundred weight)

Geographic area	February 1978		January 1978		February 1977	
	Wheat ground for flour	Wheat flour production	Wheat ground for flour	Wheat flour production	Wheat ground for flour	Wheat flour production
United States, total.....	48,207	21,328	48,430	21,787	48,023	21,425
Middle Atlantic.....	6,281	2,779	6,087	2,692	5,523	2,488
New York.....	5,089	2,248	4,897	2,162	4,489	2,038
North Central.....	26,672	11,786	26,579	12,106	27,288	12,194
Ohio.....	2,611	1,119	2,389	1,032	2,515	1,081
Indiana.....	1,092	472	1,148	498	1,231	516
Illinois.....	2,863	1,265	2,628	1,177	3,078	1,353
Michigan.....	834	355	733	321	696	305
Minnesota.....	5,391	2,346	5,904	2,683	5,936	2,748
Iowa.....	(D)	(D)	(D)	(D)	(D)	(D)
Missouri.....	4,268	1,909	3,882	1,978	4,739	2,117
Nebraska.....	(D)	727	(D)	(D)	1,485	661
Kansas.....	6,383	2,880	6,650	2,964	5,789	2,607
South Atlantic.....	2,937	1,261	2,841	1,220	2,626	1,121
East South Central.....	2,487	1,023	2,674	1,101	2,516	1,073
Tennessee.....	1,943	795	2,128	869	1,933	823
West South Central.....	3,362	1,512	3,280	1,486	3,202	1,425
Oklahoma.....	1,383	634	1,396	645	1,467	666
Texas.....	1,559	692	1,421	638	1,497	649
Mountain.....	2,543	1,175	2,676	1,214	2,583	1,165
Montana.....	621	319	619	287	659	316
Utah.....	(D)	(D)	(D)	(D)	(D)	(D)
Pacific.....	3,925	1,792	4,293	1,968	4,285	1,959
Washington.....	1,070	481	1,150	517	1,387	623
Oregon.....	634	291	721	330	876	397
California and Hawaii.....	2,221	1,020	2,422	1,121	2,022	939

Note: Detail may not add to total due to independent rounding.

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Table 4.--EXPORTS OF WHEAT AND WHEAT FLOUR

Country to which exported	January 1978	December 1977	1 month through January 1978
WHEAT FLOUR, EXCEPT MEAL AND GROATS, DONATED FOR RELIEF OR CHARITY (1314010 & 1314030) (1,000 cwt.)			
Total.....	146	146	146
Egypt.....	63	29	63
Guatemala.....	-	-	-
Colombia.....	-	-	-
Ecuador.....	-	-	-
Brazil.....	-	4	-
Israel.....	42	-	42
India.....	13	1	13
Chile.....	-	48	-
Sri Lanka (Ceylon).....	-	-	-
Philippine Republic.....	-	30	-
Morocco.....	-	96	-
Other.....	28	67	28
WHEAT FLOUR, WHOLLY U.S. WHEAT, EXCEPT DURUM FLOUR AND SEMOLINA (1314040) (1,000 cwt.)			
Total.....	506	1,219	506
Nicaragua.....	20	2	20
Jamaica.....	5	268	5
Brazil.....	-	-	-
Iceland.....	2	3	2
Jordan.....	-	22	-
Saudi Arabia.....	175	651	175
Sri Lanka (Ceylon).....	-	10	-
Egypt.....	190	-	190
Philippine Republic.....	-	-	-
Korean Republic.....	-	-	-
Morocco.....	-	-	-
Other.....	114	263	114
WHEAT, INCLUDING SPELT OR MESLIN, UNMILLED, NOT DONATED FOR RELIEF OR CHARITY (1306540) (1,000 bu.)			
Total.....	64,567	86,691	64,567
U.S.S.R.....	12,095	14,201	12,095
Venezuela.....	1,623	2,713	1,623
Peru.....	-	-	-
Brazil.....	5,929	7,210	5,929
Portugal.....	2,990	-	2,990
Iran.....	6,283	2,317	6,283
Indonesia.....	955	1,448	955
Korean Republic.....	3,180	8,747	3,180
China (Taiwan).....	-	3,955	-
Japan.....	8,477	1,277	8,477
Egypt.....	-	2,363	-
Nigeria.....	1,571	2,276	1,571
Other.....	21,464	40,184	21,464

Note: Data in this table are taken from Foreign Trade publication FT410, U.S. Exports. The Schedule B codes are shown above.

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Wheat Flour—Includes whole wheat flour, farina, industrial flour, and durum flour.

Stocks of Flour (quarterly)—Represents mill stocks in all positions, sold and unsold.

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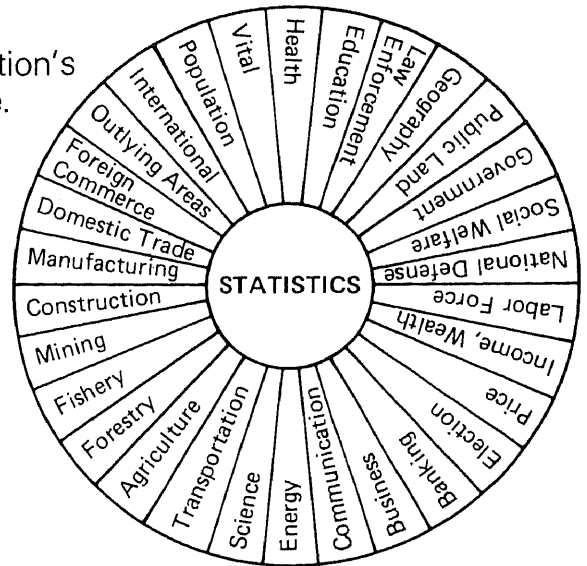
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Foreign Trade publications	Juanita Noone	(301) 763-5140
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1977

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of the United States

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Flour Milling Products

MARCH 1978

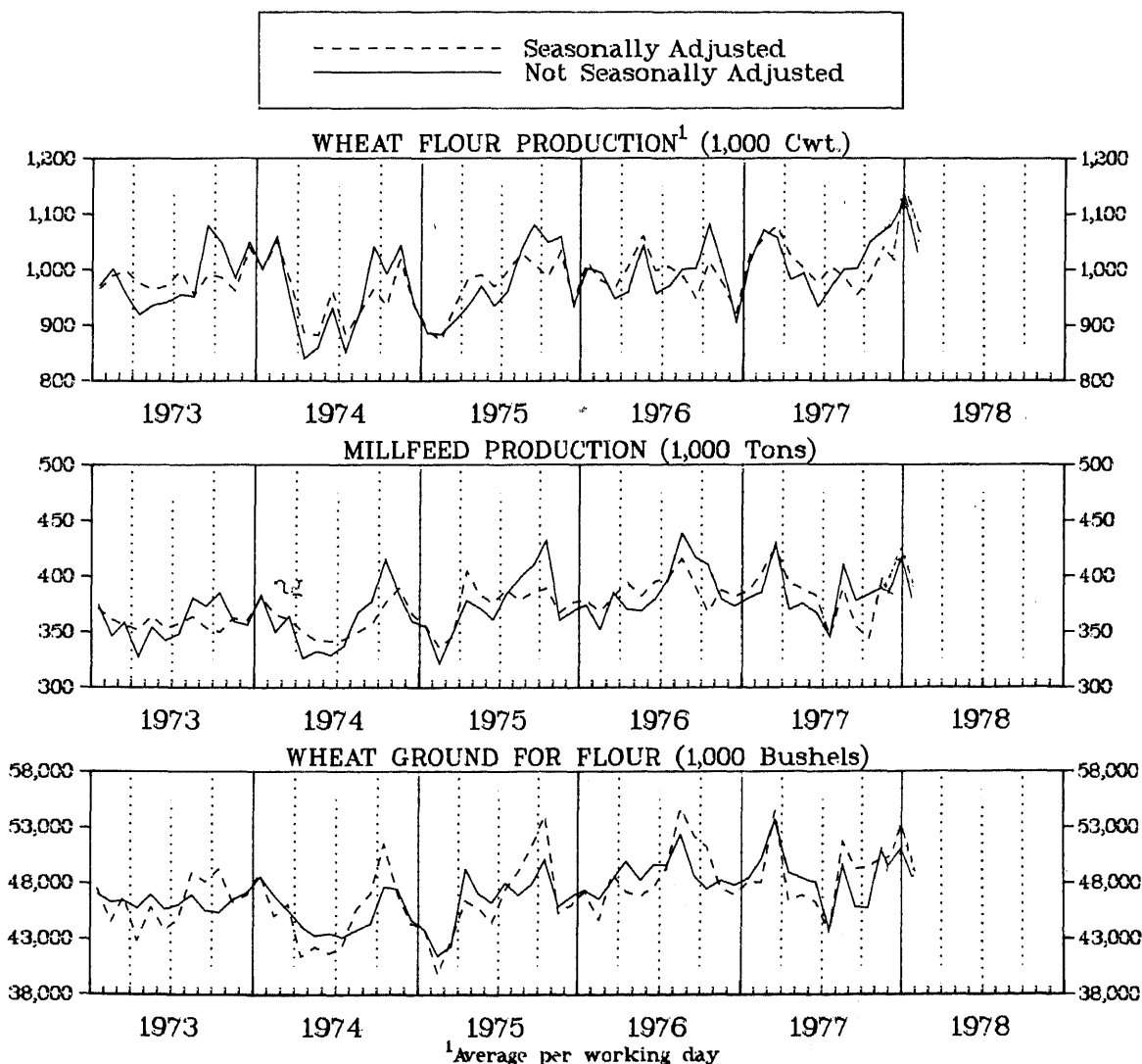
M20A(78)-3

Issued May 1978

The statistics in this publication are based on a survey of manufacturers and represent total U.S. production of flour milling products. Estimates are included for companies whose reports were not received in time for tabulation. A more com-

plete description of this survey appears on page 5. An annual current industrial report is published in this series. The annual report includes all the months for the current and previous years and incorporates all known revisions in the series.

WHEAT FLOUR MILLING 1973 TO 1978



Address inquiries concerning these figures to U.S. Department of Commerce, Bureau of the Census, Industry Division, Washington, D.C. 20233, or call Geraldine Bynum, (301) 763-7807.

For sale by the Subscriber Services Section (Publications), Bureau of the Census, Washington, D.C. 20233, or any U.S. Department of Commerce district office. Postage stamps not acceptable; currency submitted at sender's risk. Remittances from foreign countries must be by international money order or by a draft on a U.S. bank. Price 25 cents per copy, \$3.30 per year.

Table 1A.--SUMMARY OF WHEAT FLOUR MILLING: 1976 TO 1978

(Seasonally adjusted)			
Month and year	Wheat flour production average per working day ¹ (1,000 cwt.)	Millfeed production (1,000 tons)	Wheat ground for flour (1,000 bushels)
1978			
March.....	1,099	428	54,580
February.....	1,071	404	51,054
January.....	1,061	388	48,870
1977			
December.....	1,137	421	53,169
November.....	1,039	398	51,034
October.....	983	343	45,796
September.....	954	355	45,821
August.....	985	389	49,628
July.....	1,004	346	43,693
June.....	976	382	48,088
May.....	1,002	389	48,419
April.....	1,024	393	48,949
March.....	1,079	426	53,682
February.....	1,057	404	50,128
January.....	1,027	387	48,374
1976			
December.....	922	382	47,848
November.....	974	387	48,209
October.....	1,014	368	47,466
September.....	946	392	48,672
August.....	988	415	52,331
July.....	1,005	398	49,569
June.....	998	395	49,630
May.....	1,060	382	48,254
April.....	1,005	394	49,939
March.....	966	381	48,218

See footnotes at end of table 1B.

Table 1B.--SUMMARY OF WHEAT FLOUR MILLING: 1976 TO 1978

(Not seasonally adjusted)								
Month and year	Wheat flour production (1,000 cwt.)		Millfeed production (tons)	Wheat ground for flour (1,000 bushels)	Wheat flour mill stocks ² (1,000 cwt.)	Daily 24-hour capacity in wheat flour ² (1,000 cwt.)	Wheat flour produced as percent of capacity	Flour extraction rate ³ (percent)
	Average per working day ¹	Calendar month total						
1978								
March.....	1,079	24,839	432,591	55,344	4,096	1,009	107.0	74.8
February.....	1,084	21,783	385,269	48,910	(NA)	1,017	106.6	74.2
January.....	1,038	21,787	380,717	48,430	(NA)	1,017	102.2	74.9
1977								
December.....	1,112	23,363	410,169	52,106	4,160	1,017	109.4	74.7
November.....	1,069	22,445	389,311	50,166	(NA)	968	110.4	74.6
October.....	1,050	22,054	382,730	49,360	(NA)	968	108.5	74.5
September.....	1,002	22,039	378,118	49,258	3,537	968	103.4	74.6
August.....	1,001	23,023	410,232	51,712	(NA)	957	104.6	74.2
July.....	970	19,393	344,584	43,518	(NA)	957	101.3	74.3
June.....	933	20,529	366,513	46,261	4,167	957	97.5	74.0
May.....	993	20,861	375,128	46,870	(NA)	976	101.8	74.2
April.....	982	20,632	369,798	46,402	(NA)	976	100.7	74.1
March.....	1,057	24,321	430,120	54,434	4,248	976	108.3	74.5
February.....	1,071	21,425	385,212	48,023	(NA)	990	108.2	74.4
January.....	1,015	21,320	380,273	48,035	(NA)	990	102.5	74.0
1976								
December.....	905	20,804	372,844	46,931	4,334	990	91.4	73.9
November.....	1,001	21,031	379,784	47,486	(NA)	998	100.3	73.8
October.....	1,082	22,723	410,072	51,216	(NA)	998	108.4	73.9
September.....	1,053	23,178	417,142	52,225	3,621	998	105.5	73.4
August.....	1,103	24,257	437,548	54,634	(NA)	990	111.4	74.0
July.....	989	21,751	395,596	49,272	(NA)	990	100.1	73.6
June.....	957	21,059	378,582	47,645	3,923	990	96.7	73.7
May.....	1,044	20,871	369,318	46,758	(NA)	997	104.7	74.4
April.....	960	21,113	369,972	47,192	(NA)	997	96.3	74.5
March.....	947	21,771	384,578	48,845	4,510	997	94.9	74.3

Note: Data include estimates for small mills. The data shown for 1976 and 1977 exclude a number of plants that began operations during this period. These companies account for approximately 5-8 percent of our 1977 estimates. Revised monthly data will be shown in the annual summary to be released in early 1978. Data for January 1978 will include the production for these companies.

(NA) Not available.

¹The number of working days per month is computed on the basis of a 5-day week with allowances for the following holidays: January 1, Memorial Day, Independence Day, Thanksgiving Day, and December 25.

²Collected quarterly.

³Wheat flour production as compared with amount of wheat ground.

Table 2.--QUANTITY OF DURUM WHEAT AND RYE FLOUR PRODUCTION, GRAIN CONSUMPTION, MILL STOCKS, AND CAPACITY

Product code	Description of item	Unit of measure	March 1978	February 1978	March 1977
	DURUM WHEAT (Included in table 1 data):				
0011173	Durum wheat ground.....	M bu.....	3,329	3,285	3,730
2041153	Straight semolina durum flour.....	M cwt.....	1,476	1,460	1,632
2041155	Blended semolina durum flour.....	..do.....	(D)	(D)	(D)
	RYE:				
0011951	Rye ground for flour.....	M bu.....	291	298	316
2041611	Rye flour production.....	M cwt.....	128	131	141
2041618	Rye millfeed production...	Tons.....	1,543	1,674	1,690
2041611	Rye flour stocks ¹	M cwt.....	(NA)	(NA)	29
	24 hour capacity ¹.....	..do.....	14	14	10

Note: Data include estimates for small mills. Detail may not add to total due to independent rounding. These data exclude all flour blended by macaroni and spaghetti manufacturers, etc., as such activities are not within scope of this survey. Only mills engaged in milling flour or meal are included in this survey.

(D) Withheld to avoid disclosure of figures for individual companies.

(NA) Not available.

¹Collected quarterly.

Table 3.--QUANTITY OF WHEAT GROUND FOR FLOUR AND WHEAT FLOUR PRODUCTION, BY DIVISIONS AND STATES

(Wheat ground for flour in thousands of bushels; wheat production in thousands of hundred weight)

Geographic area	March 1978		February 1978		March 1977	
	Wheat ground for flour	Wheat flour production	Wheat ground for flour	Wheat flour production	Wheat ground for flour	Wheat flour production
United States, total.....	55,344	24,839	48,910	21,783	54,434	24,321
Middle Atlantic.....	7,067	3,142	6,573	2,916	6,875	3,109
New York.....	5,413	2,408	5,155	2,284	5,782	2,629
North Central.....	30,160	13,602	26,825	12,003	30,304	13,536
Ohio.....	3,003	1,325	2,611	1,133	3,306	1,437
Indiana.....	1,325	573	1,092	473	1,472	626
Illinois.....	3,307	1,465	3,011	1,330	3,298	1,445
Michigan.....	936	402	840	357	907	398
Minnesota.....	6,168	2,808	5,391	2,346	6,420	2,958
Iowa.....	(D)	(D)	(D)	(D)	(D)	(D)
Missouri.....	5,091	2,347	4,321	1,934	5,054	2,260
Nebraska.....	(D)	(D)	(D)	(D)	1,493	660
Kansas.....	6,820	3,108	6,223	2,939	6,443	2,901
South Atlantic.....	3,642	1,578	3,243	1,438	3,000	1,278
East South Central.....	2,775	1,203	2,420	1,024	2,915	1,267
Tennessee.....	2,176	949	1,876	796	2,237	974
West South Central.....	3,837	1,718	3,406	1,458	3,369	1,506
Oklahoma.....	1,606	733	1,383	634	1,597	724
Texas.....	1,668	736	1,566	647	1,472	645
Mountain.....	3,099	1,399	2,543	1,175	3,033	1,362
Montana.....	721	341	621	319	784	371
Utah.....	(D)	(D)	(D)	(D)	(D)	(D)
Pacific.....	4,764	2,197	3,900	1,769	4,938	2,263
Washington.....	1,384	627	1,070	481	1,646	743
Oregon.....	729	336	634	291	1,004	451
California and Hawaii.....	2,651	1,234	2,196	997	2,288	1,069

Note: Detail may not add to total due to independent rounding.

(D) Withheld to avoid disclosure of figures for individual companies.

Table 4.--EXPORTS OF WHEAT AND WHEAT FLOUR

Country to which exported	February 1978	January 1978	2 months through February 1978
WHEAT FLOUR, EXCEPT MEAL AND GROATS, DONATED FOR RELIEF OR CHARITY (1314010 & 1314030) (1,000 cwt.)			
Total.....	134	146	280
Egypt.....	7	63	70
Guatemala.....	-	-	-
Colombia.....	9	-	9
Ecuador.....	2	-	2
Brazil.....	-	-	-
Israel.....	2	42	44
India.....	-	13	13
Chile.....	33	-	33
Sri Lanka (Ceylon).....	-	-	-
Philippine Republic.....	73	-	73
Morocco.....	-	-	-
Other.....	8	28	36
WHEAT FLOUR, WHOLLY U.S. WHEAT, EXCEPT DURUM FLOUR AND SEMOLINA ,1314040) (1,000 cwt.)			
Total.....	1,480	506	1,986
Nicaragua.....	-	2	2
Jamaica.....	258	5	263
Brazil.....	-	-	-
Iceland.....	8	2	10
Jordan.....	-	-	-
Saudi Arabia.....	348	175	523
Sri Lanka (Ceylon).....	-	-	-
Egypt.....	603	190	793
Philippine Republic.....	-	-	-
Korean Republic.....	-	-	-
Morocco.....	-	-	-
Other.....	263	132	395
WHEAT, INCLUDING SPELT OR MESLIN, UNMILLED, NOT DONATED FOR RELIEF OR CHARITY (1306540) (1,000 bu.)			
Total.....	94,539	64,567	159,106
U.S.S.R.....	14,703	12,095	26,798
Venezuela.....	1,469	1,623	3,092
Peru.....	-	-	-
Brazil.....	8,715	5,929	14,644
Portugal.....	3,125	2,990	6,115
Iran.....	2,534	6,283	8,817
Indonesia.....	-	955	955
Korean Republic.....	9,923	3,180	13,103
China (Taiwan).....	3,009	-	3,009
Japan.....	14,032	8,477	22,509
Egypt.....	5,023	-	5,023
Nigeria.....	2,645	1,571	4,216
Other.....	29,361	21,464	50,825

Note: Data in this table are taken from Foreign Trade publication FT410, U.S. Exports. The Schedule B codes are shown above.

- Represents zero.

Table 5.--PRODUCTION, EXPORTS, IMPORTS, AND APPARENT CONSUMPTION OF WHEAT PRODUCTION: FEBRUARY 1978

Product	Quantity produced (1,000 cwt.)	Exports of domestic merchandise	Imports for consumption	Apparent consumption	Percent, imports to apparent consumption
Wheat flour.....	21,783	1,614	(X)	20,169	(X)

(X) Not applicable.

DESCRIPTION OF SURVEY

Scope of Survey—This survey covers firms engaged in the production of wheat and rye flour.

Sampling Description—The data shown in this publication were collected on Bureau of the Census monthly Form M-20A, Flour Milling Products. The aggregates published in this report have been compiled from a sample of approximately 250 respondents, accounting for 98 percent of the total U.S. production of flour mill products. The universe for this sample was the 1958 Census of Manufactures. The reporting panel consists of mills with a daily capacity of over 400 sacks of flour. Approximately 200 small establishments are in the nonmail universe. Their production data are estimated based upon their 1958 Census of Manufactures report. The monthly reporting panel was selected by arraying the reporting units in descending order by size for each product line, then choosing a sufficient number of respondents (beginning with the largest) to yield a coverage of approximately 98 percent for each product line.

Data prior to December 1977, shown in this publication, are not comparable to the current data due to an extensive review and updating of the mailing panel. The revisions will be shown in the Summary for 1977 to be issued later this year.

Survey Error—The figures for the current month include estimates for respondents in the reporting panel whose reports were not received in time for tabulation, as well as for 200 small respondents excluded from the mail panel. Missing figures for companies in the reporting panel are "imputed" from the month-to-month movements shown by reporting firms. The overall imputation rate is generally limited to 12 percent, including about 2 percent for small respondents excluded from the monthly reporting panel. Individual items with imputation rates greater than 12-percent are footnoted.

The imputation rate is not an explicit indicator of the potential error in published figures due to nonresponse, both because the actual monthly movements for nonrespondents may or may not closely agree with the imputed movements, and because the estimates for nonpanel cases may or may not reflect their current activity. The probable difference between the actual and imputed figures is unknown. The degree of uncertainty regarding the accuracy of the data, however, increases as the percentage of imputation increases. Figures with imputation rates above 12 percent, particularly, should be used with caution.

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COMPARISON OF EXPORT, IMPORT, AND DOMESTIC OUTPUT DATA

Generally, it is somewhat easier to find a reasonable statistical basis for a comparison of exports with domestic output than for a comparison of imports with domestic output. Aside from the differences in the basic commodity classifications used, there are a substantial number of imported commodities which are not produced in the United States or are produced in very small quantities. On the other hand, the merchandise exported from the United States is ordinarily produced in this country and reflects items important in output.

There are other problems affecting the comparability of the three sets of data. Differences in methods of valuation is perhaps the principal such problem. There may be elements of duplication in output data but not in imports or exports; low-value transactions are excluded from data for individual export and import commodity classifications; and a small portion of manufacturing output is not allocated to detailed commodity lines. All of these factors affect comparability to some degree. For these reasons the relationships shown in this report should be considered as only approximations.

(a) *Valuation*—Domestic producers' shipments, or production, are usually valued at the point of production—the factory, mine, or farm.

On the other hand, exports are by definition valued at the point of exportation—seaport, border point, or airport. Export values are the selling price, or cost if not sold, and include expenditures for freight, insurance, and other charges to the export point.

Further, the exporters' trade margin above costs increases the export values compared with producers' values. Information on the magnitude of this incremental margin on a commodity-by-commodity basis is not available.

The dollar value shown for imports in the basic statistics is defined ordinarily as the market value in the foreign country and excludes U.S. import duties, transportation, insurance, and

other costs. In actual practice only the values reported for imports subject to an ad valorem rate of duty (accounting for 10 to 15 percent of total imports) tend to conform to this definition. For other imports, the reported values may inadvertently include ocean freight; intracompany shipments may reflect arbitrary values; etc.

Thus, import values tend to understate the unit prices at which imported goods are sold in the U.S. market, in that they do not cover transportation, insurance costs, import duties, and other costs. By the same token, the total value of imports relative to domestic output tends to be understated if viewed at the point of entry into the U.S. market. The calculated value of import duties is shown separately for each commodity line in the table, but sufficient information is not available on the transportation, insurance, and other costs for individual commodities for those costs to be shown in this report.

(b) *Duplication in Quantity and Value of Output*—Because producers' shipments of some commodities may be used as materials for incorporation into other commodities, combinations of data for such commodities may contain a certain amount of duplication. Thus, percentages of exports to output or imports to apparent consumption (output plus imports minus exports) at 4-digit or broader levels may be understated.

Where the duplication is known to be substantial, the output data are appropriately noted in the table.

(c) *Low-Value Export and Import Transactions*—Commodity information is not shown for individual imports valued under \$251. For exports, commodity information is not reported for shipments individually valued under \$251 effective October 1969 and for shipments valued under \$100 prior to October 1969. This is believed to have only negligible effect on the statistics for the bulk of the commodities.

(d) *Manufacturers' Shipments, Not Specified by Kind*—The value of manufacturers' shipments at the 4-digit commodity level often includes a small amount which is not distributed among the individual 5-digit product classes. Export and import percentages at the more detailed levels might thus be slightly overstated.

(e) *Time Lag Between Output and Exports*—There will sometimes be a lag between the time a commodity is produced or shipped by the producer and the time it is actually exported. The time lag will usually be greater if the merchandise moves through intermediaries (wholesalers, exporters) rather than directly from producers into the export market. Ordinarily, this type of discrepancy would not be very important in annual figures.

(f) *"Direct" vs "Total" Commodity Exports*—The commodity export data in this report represent direct exports of

those commodities. They do not include the exports of the commodities which are incorporated into other, more finished products and exported in finished form. Thus, by showing only direct exports, the relation of exports to output for intermediate products, such as steel shapes and forms, is considerably understated. The figures for steel exported as such, does not include steel incorporated in automobiles, tractors, etc., which are also exported.

(g) *Used Commodities*—With a few exceptions, used or rebuilt commodities are classified in the same import or export codes as is new merchandise. Percentages are thus overstated to the extent that used or rebuilt products are significant in trade.

RELATED REPORTS

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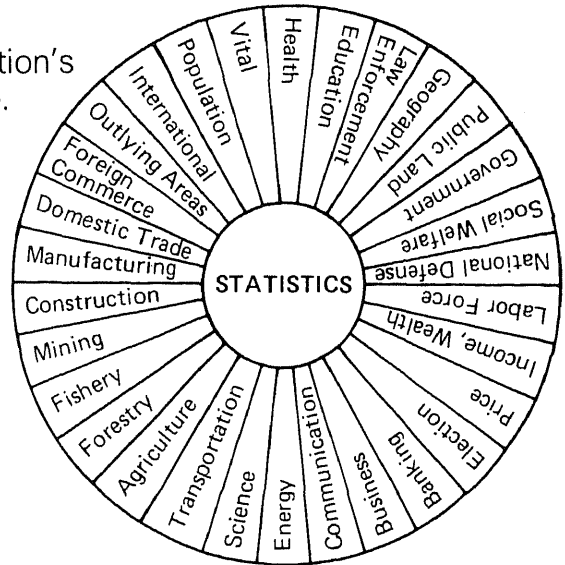
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Flour Milling Products



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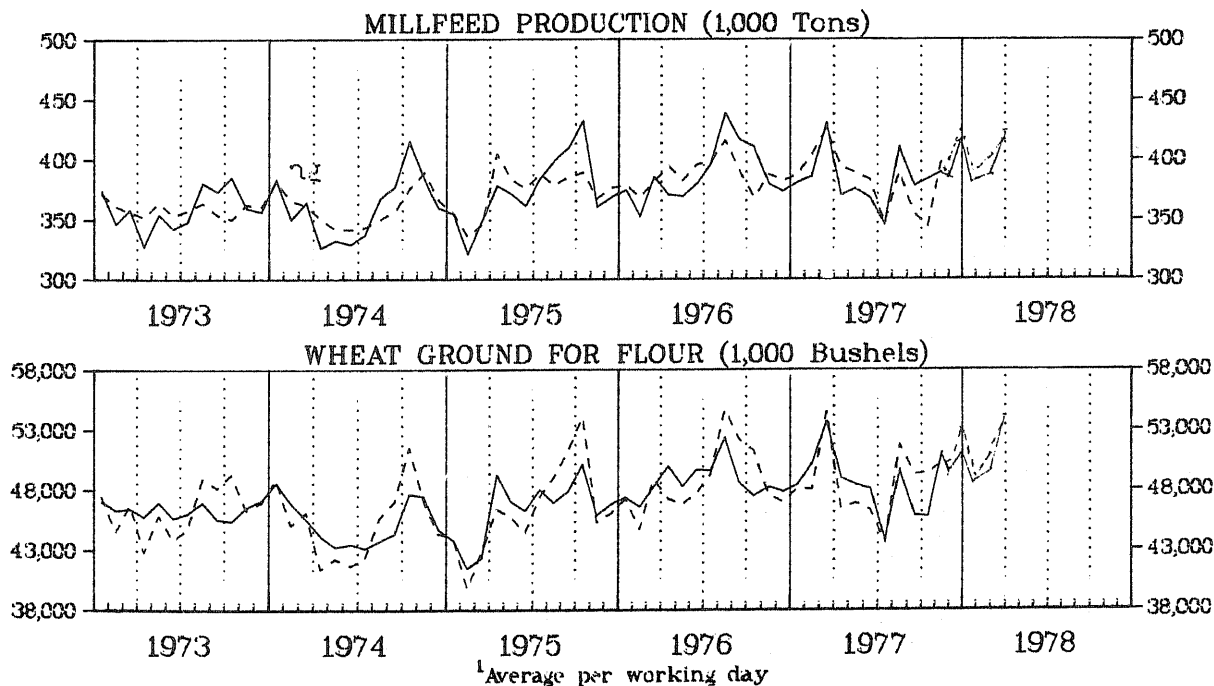
M20A(78)-4
Issued June 1978

The statistics in this publication are based on a survey of manufacturers and represent total U.S. production of flour milling products. Estimates are included for companies whose reports were not received in time for tabulation. A more com-

plete description of this survey appears on page 5. An annual current industrial report is published in this series. The annual report includes all the months for the current and previous years and incorporates all known revisions in the series.

WHEAT FLOUR MILLING 1973 TO 1978

----- Seasonally Adjusted
———— Not Seasonally Adjusted



Address inquiries concerning these figures to U.S. Department of Commerce, Bureau of the Census, Industry Division, Washington, D.C. 20233, or call Geraldine Bynum, (301) 763-7807.

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Table 1A.--SUMMARY OF WHEAT FLOUR MILLING: 1976 TO 1978

(Seasonally adjusted)

Month and year	Millfeed production (1,000 tons)	Wheat ground for flour (1,000 bushels)
1978		
April.....	410	53,442
March.....	426	54,064
February.....	404	51,054
January.....	388	48,870
1977		
December.....	421	53,169
November.....	398	51,034
October.....	343	45,796
September.....	355	45,821
August.....	389	49,628
July.....	346	43,693
June.....	382	48,088
May.....	389	48,419
April.....	393	48,949
March.....	426	53,682
February.....	404	50,128
January.....	387	48,374
1976		
December.....	382	47,848
November.....	387	48,209
October.....	368	47,466
September.....	392	48,672
August.....	415	52,331
July.....	398	49,569
June.....	395	49,630
May.....	382	48,254
April.....	394	49,939

See footnotes at end of table 1B.

Table 1B.--SUMMARY OF WHEAT FLOUR MILLING: 1976 TO 1978

(Not seasonally adjusted)

Month and year	Wheat flour production (1,000 cwt.)	Millfeed production (tons)	Wheat ground for flour (1,000 bushels)	Wheat flour mill stocks ² (1,000 cwt.)	Daily 24-hour capacity in wheat flour ² (1,000 cwt.)	Wheat flour produced as percent of capacity	Flour extraction rate ³ (percent)
1978							
April.....	22,946	386,366	50,716	(NA)	1,009	108.3	75.4
March.....	24,330	430,260	54,821	4,096	1,009	114.8	73.8
February.....	21,783	385,269	48,910	(NA)	1,017	106.6	74.2
January.....	21,787	380,717	48,430	(NA)	1,017	102.2	74.9
1977							
December.....	23,363	410,169	52,106	4,160	1,017	109.4	74.7
November.....	22,445	389,311	50,166	(NA)	968	110.4	74.6
October.....	22,054	382,730	49,360	(NA)	968	108.5	74.5
September.....	22,039	378,118	49,258	3,537	968	103.4	74.6
August.....	23,023	410,232	51,712	(NA)	957	104.6	74.2
July.....	19,393	344,584	43,518	(NA)	957	101.3	74.3
June.....	20,529	366,513	46,261	4,167	957	97.5	74.0
May.....	20,861	375,128	46,870	(NA)	976	101.8	74.2
April.....	20,632	369,798	46,402	(NA)	976	100.7	74.1
March.....	24,321	430,120	54,434	4,248	976	108.3	74.5
February.....	21,425	385,212	48,023	(NA)	990	108.2	74.4
January.....	21,320	380,273	48,035	(NA)	990	102.5	74.0
1976							
December.....	20,804	372,844	46,931	4,334	990	91.4	73.9
November.....	21,031	379,784	47,486	(NA)	998	100.3	73.8
October.....	22,723	410,072	51,216	51,216	998	108.4	73.9
September.....	22,178	417,142	52,225	3,621	998	105.5	73.4
August.....	24,257	437,548	54,634	(NA)	990	111.4	74.0
July.....	21,751	395,596	49,272	(NA)	990	100.1	73.6
June.....	21,059	378,582	47,645	3,923	990	96.7	73.7
May.....	20,871	369,318	46,758	(NA)	997	104.7	74.4
April.....	21,113	369,972	47,192	(NA)	997	96.3	74.5

Note: Data include estimates for small mills. The data shown for 1976 and 1977 exclude a number of plants that began operations during this period. These companies account for approximately 5-8 percent of our 1977 estimates. Revised monthly data will be shown in the annual summary to be released in early 1978. Data for January 1978 will include the production for these companies.

(NA) Not available.

¹The number of working days per month is computed on the basis of a 5-day week with allowances for the following holidays: January 1, Memorial Day, Independence Day, Thanksgiving Day, and December 25.

²Collected quarterly.

³Wheat flour production as compared with amount of wheat ground.

Table 2.--QUANTITY OF DURUM WHEAT AND RYE FLOUR PRODUCTION, GRAIN CONSUMPTION, MILL STOCKS, AND CAPACITY

Product code	Description of item	Unit of measure	April 1978	March 1978	April 1977
	DURUM WHEAT (Included in table 1 data):				
0011173	Durum wheat ground.....	M bu.....	2,242	3,326	2,679
2041153	Straight semolina durum flour.....	M cwt.....	996	1,476	1,131
2041155	Blended semolina durum flour.....	..do.....	(D)	(D)	(D)
	RYE:				
0011951	Rye ground for flour.....	M bu.....	284	291	282
2041611	Rye flour production.....	M cwt.....	126	128	135
2041618	Rye millfeed production....	Tons.....	1,591	1,543	1,413
2041611	Rye flour stocks ¹	M cwt.....	(NA)	30	(NA)
	24 hour capacity ¹.....	..do.....	10	16	10

Note: Data include estimates for small mills. Detail may not add to total due to independent rounding. These data exclude all flour blended by macaroni and spaghetti manufacturers, etc., as such activities are not within scope of this survey. Only mills engaged in milling flour or meal are included in this survey.

(D) Withheld to avoid disclosure of figures for individual companies.

(NA) Not available.

¹Collected quarterly.

Table 3.--QUANTITY OF WHEAT GROUND FOR FLOUR AND WHEAT FLOUR PRODUCTION, BY DIVISIONS AND STATES

(Wheat ground for flour in thousands of bushels; wheat production in thousands of hundredweight)

Geographic area	April 1978		March 1978		April 1977	
	Wheat ground for flour	Wheat flour production	Wheat ground for flour	Wheat flour production	Wheat ground for flour	Wheat flour production
United States, total.....	50,716	22,946	54,821	24,330	46,402	20,632
Middle Atlantic.....	5,829	2,655	6,895	2,841	5,494	2,480
New York.....	4,549	2,081	5,417	2,451	4,500	2,043
North Central.....	28,184	12,864	29,741	13,330	26,203	11,678
Ohio.....	2,744	1,211	3,000	1,325	2,494	1,080
Indiana.....	1,273	569	1,323	570	1,307	547
Illinois.....	3,222	1,385	3,165	1,414	2,913	1,279
Michigan.....	902	377	971	406	770	338
Minnesota.....	5,672	2,579	6,168	2,808	5,568	2,546
Iowa.....	(D)	(D)	(D)	(D)	(D)	(D)
Missouri.....	4,263	2,144	5,069	2,346	4,388	1,958
Nebraska.....	(D)	(D)	(D)	(D)	1,274	566
Kansas.....	7,105	3,213	6,711	2,955	6,002	2,702
South Atlantic.....	2,934	1,316	3,477	1,525	2,392	1,030
East South Central.....	2,537	1,112	2,835	1,244	2,441	1,056
Tennessee.....	2,046	899	2,252	990	1,866	808
West South Central.....	3,637	1,542	3,837	1,719	2,995	1,285
Oklahoma.....	1,531	710	1,606	733	1,445	657
Texas.....	1,600	611	1,668	737	1,251	494
Mountain.....	2,804	1,303	3,070	1,399	2,688	1,205
Montana.....	629	300	721	341	633	300
Utah.....	(D)	(D)	(D)	(D)	(D)	(D)
Pacific.....	4,791	2,154	4,966	2,272	4,189	1,898
Washington.....	1,442	634	1,407	634	1,371	614
Oregon.....	769	333	798	358	713	324
California and Hawaii.....	2,580	1,187	2,761	1,280	2,105	960

Note: Detail may not add to total due to independent rounding.

(D) Withheld to avoid disclosure of figures for individual companies.

Table 4.--EXPORTS OF WHEAT AND WHEAT FLOUR

Country to which exported	March 1978	February 1978	3 months through March 1978
WHEAT FLOUR, EXCEPT MEAL AND GROATS, DONATED FOR RELIEF OR CHARITY (1314010 & 1314030) (1,000 cwt.)			
Total.....	130	134	460
Egypt.....	15	7	85
Guatemala.....	6	-	6
Colombia.....	7	9	16
Ecuador.....	-	2	2
Brazil.....	-	-	-
Israel.....	-	2	44
India.....	18	-	31
Chile.....	23	33	56
Sri Lanka (Ceylon).....	44	-	44
Philippine Republic.....	-	73	73
Morocco.....	22	-	22
Other.....	45	8	81
WHEAT FLOUR, WHOLLY U.S. WHEAT, EXCEPT DURUM FLOUR AND SEMOLINA (1314040) (1,000 cwt.)			
Total.....	1,588	1,480	3,574
Nicaragua.....	-	-	2
Jamaica.....	26	258	289
Brazil.....	-	-	-
Iceland.....	2	8	12
Jordan.....	-	-	-
Saudi Arabia.....	127	348	650
Sri Lanka (Ceylon).....	-	-	-
Egypt.....	901	603	1,694
Philippine Republic.....	-	-	-
Korean Republic.....	-	-	-
Morocco.....	-	-	-
Other.....	532	263	927
WHEAT, INCLUDING SPELT OR MESLIN, UNMILLED, NOT DONATED FOR RELIEF OR CHARITY (1306540) (1,000 bu.)			
Total.....	103,316	94,539	262,422
U.S.S.R.....	12,307	14,703	39,105
Venezuela.....	2,050	1,469	5,142
Peru.....	944	-	944
Brazil.....	9,355	8,715	23,999
Portugal.....	3,999	3,125	10,114
Iran.....	3,535	2,534	12,352
Indonesia.....	1,242	-	2,197
Korean Republic.....	5,776	9,923	18,879
China (Taiwan).....	1,017	3,009	4,026
Japan.....	6,665	14,032	29,174
Egypt.....	7,211	5,023	12,234
Nigeria.....	1,981	2,645	6,197
Other.....	47,234	29,361	98,059

Note: Data in this table are taken from Foreign Trade publication FT410, U.S. Exports. The Schedule B codes are shown above.

- Represents zero.

Table 5.--PRODUCTION, EXPORTS, IMPORTS, AND APPARENT CONSUMPTION OF WHEAT PRODUCTION: MARCH 1978

Product	Quantity produced (1,000 cwt.)	Exports of domestic merchandise	Imports for consumption	Apparent consumption	Percent, imports to apparent consumption
Wheat flour.....	24,330	1,768	(X)	22,662	(X)

(X) Not applicable.

DESCRIPTION OF SURVEY

Scope of Survey—This survey covers firms engaged in the production of wheat and rye flour.

Sampling Description—The data shown in this publication were collected on Bureau of the Census monthly Form M20A, Flour Milling Products. The aggregates published in this report have been compiled from a sample of approximately 250 respondents, accounting for 98 percent of the total U.S. production of flour mill products. The universe for this sample was the 1958 Census of Manufactures. The reporting panel consists of mills with a daily capacity of over 400 sacks of flour. Approximately 200 small establishments are in the nonmail universe. Their production data are estimated based upon their 1958 Census of Manufactures report. The monthly reporting panel was selected by arraying the reporting units in descending order by size for each product line, then choosing a sufficient number of respondents (beginning with the largest) to yield a coverage of approximately 98 percent for each product line.

Data prior to December 1977, shown in this publication, are not comparable to the current data due to an extensive review and updating of the mailing panel. The revisions will be shown in the Summary for 1977 to be issued later this year.

Survey Error—The figures for the current month include estimates for respondents in the reporting panel whose reports were not received in time for tabulation, as well as for 200 small respondents excluded from the mail panel. Missing figures for companies in the reporting panel are "imputed" from the month-to-month movements shown by reporting firms. The overall imputation rate is generally limited to 12 percent, including about 2 percent for small respondents excluded from the monthly reporting panel. Individual items with imputation rates greater than 12-percent are footnoted.

The imputation rate is not an explicit indicator of the potential error in published figures due to nonresponse, both because the actual monthly movements for nonrespondents may or may not closely agree with the imputed movements, and because the estimates for nonpanel cases may or may not reflect their current activity. The probable difference between the actual and imputed figures is unknown. The degree of uncertainty regarding the accuracy of the data, however, increases as the percentage of imputation increases. Figures with imputation rates above 12 percent, particularly, should be used with caution.

Revision to Previous Period Data—Statistics for previous months may be revised due to receipt of corrected data from respondents, including late reports for which imputations were previously made as described above, and other corrections. Figures which have been revised by more than 5 percent from previously published figures are indicated by footnotes.

Reporting Period Adjustment—Since January 1975, the data have been adjusted for the number of working days in the reporting period in order to compensate for differences in individual company reporting patterns, i.e., calendar month, 4-week, 5-week periods.

Seasonal Adjustment—This report presents seasonally adjusted data in table 1A for selected series shown in table 1B. The data were seasonally adjusted using the X-11 variant of the Bureau of the Census Method II seasonal adjustment program. This seasonal adjustment program is a ratio-to-moving average method. The seasonal adjustment program largely eliminates the

effect of seasonal variations (intra-year variations repeated constantly from year to year) within the series. The seasonally adjusted data usually provide a better measure than the not seasonally adjusted (original) data of the month-to-month variations which are due to factors other than seasonal pattern.

EXPLANATION OF TERMS

Units of Quantity—Grain ground is measured in bushels of 60 pounds for wheat, and 56 pounds for rye. Flour production is measured in sacks of 100 pounds.

Capacity—Based on replies to the question, "What is the maximum quantity of flour that can be produced in your mill in one day if operated for 24 hours?", the capacity of idle mills is included until the mills are reported to be destroyed, dismantled, or abandoned.

Grain—Represents the purchased weight of grain ground, including the weight of foreign material (dockage).

Millfeed—Includes bran, middlings, shorts, and other milling by products intended principally for use as feed materials.

Wheat Flour—Includes whole wheat flour, farina, industrial flour, and durum flour.

Stocks of Flour (quarterly)—Represents mill stocks in all positions, sold and unsold.

COMPARISON OF EXPORT, IMPORT, AND DOMESTIC OUTPUT DATA

Generally, it is somewhat easier to find a reasonable statistical basis for a comparison of exports with domestic output than for a comparison of imports with domestic output. Aside from the differences in the basic commodity classifications used, there are a substantial number of imported commodities which are not produced in the United States or are produced in very small quantities. On the other hand, the merchandise exported from the United States is ordinarily produced in this country and reflects items important in output.

There are other problems affecting the comparability of the three sets of data. Differences in methods of valuation is perhaps the principal such problem. There may be elements of duplication in output data but not in imports or exports; low-value transactions are excluded from data for individual export and import commodity classifications; and a small portion of manufacturing output is not allocated to detailed commodity lines. All of these factors affect comparability to some degree. For these reasons the relationships shown in this report should be considered as only approximations.

(a) *Valuation*—Domestic producers' shipments, or production, are usually valued at the point of production—the factory, mine, or farm.

On the other hand, exports are by definition valued at the point of exportation—seaport, border point, or airport. Export values are the selling price, or cost if not sold, and include expenditures for freight, insurance, and other charges to the export point.

Further, the exporters' trade margin above costs increases the export values compared with producers' values. Information on the magnitude of this incremental margin on a commodity-by-commodity basis is not available.

The dollar value shown for imports in the basic statistics is defined ordinarily as the market value in the foreign country and excludes U.S. import duties, transportation, insurance, and

other costs. In actual practice only the values reported for imports subject to an ad valorem rate of duty (accounting for 10 to 15 percent of total imports) tend to conform to this definition. For other imports, the reported values may inadvertently include ocean freight; intracompany shipments may reflect arbitrary values; etc.

Thus, import values tend to understate the unit prices at which imported goods are sold in the U.S. market, in that they do not cover transportation, insurance costs, import duties, and other costs. By the same token, the total value of imports relative to domestic output tends to be understated if viewed at the point of entry into the U.S. market. The calculated value of import duties is shown separately for each commodity line in the table, but sufficient information is not available on the transportation, insurance, and other costs for individual commodities for those costs to be shown in this report.

(b) *Duplication in Quantity and Value of Output*—Because producers' shipments of some commodities may be used as materials for incorporation into other commodities, combinations of data for such commodities may contain a certain amount of duplication. Thus, percentages of exports to output or imports to apparent consumption (output plus imports minus exports) at 4-digit or broader levels may be understated.

Where the duplication is known to be substantial, the output data are appropriately noted in the table.

(c) *Low-Value Export and Import Transactions*—Commodity information is not shown for individual imports valued under \$251. For exports, commodity information is not reported for shipments individually valued under \$251 effective October 1969 and for shipments valued under \$100 prior to October 1969. This is believed to have only negligible effect on the statistics for the bulk of the commodities.

(d) *Manufacturers' Shipments, Not Specified by Kind*—The value of manufacturers' shipments at the 4-digit commodity level often includes a small amount which is not distributed among the individual 5-digit product classes. Export and import percentages at the more detailed levels might thus be slightly overstated.

(e) *Time Lag Between Output and Exports*—There will sometimes be a lag between the time a commodity is produced or shipped by the producer and the time it is actually exported. The time lag will usually be greater if the merchandise moves through intermediaries (wholesalers, exporters) rather than directly from producers into the export market. Ordinarily, this type of discrepancy would not be very important in annual figures.

(f) *"Direct" vs "Total" Commodity Exports*—The commodity export data in this report represent direct exports of

those commodities. They do not include the exports of the commodities which are incorporated into other, more finished products and exported in finished form. Thus, by showing only direct exports, the relation of exports to output for intermediate products, such as steel shapes and forms, is considerably understated. The figures for steel exported as such, does not include steel incorporated in automobiles, tractors, etc., which are also exported.

(g) *Used Commodities*—With a few exceptions, used or rebuilt commodities are classified in the same import or export codes as is new merchandise. Percentages are thus overstated to the extent that used or rebuilt products are significant in trade.

RELATED REPORTS

An annual current industrial report is published in this series. The annual report summarizes monthly figures and incorporates all known revisions in the series for both current and previous year, thus, providing a single reference copy to replace the monthly publications. This annual summary provides additional information on the history of this survey.

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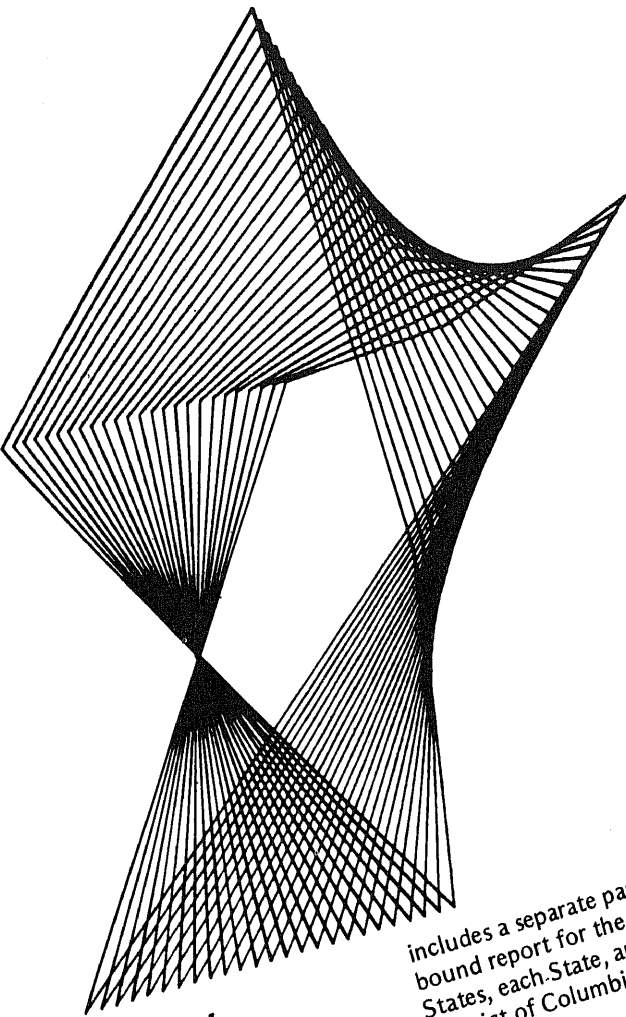
M3-1	Monthly	Manufacturers' Shipments, Inventories, and Orders
M20C	Monthly	Confectionery, Including Chocolate Products

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Flour Milling Products



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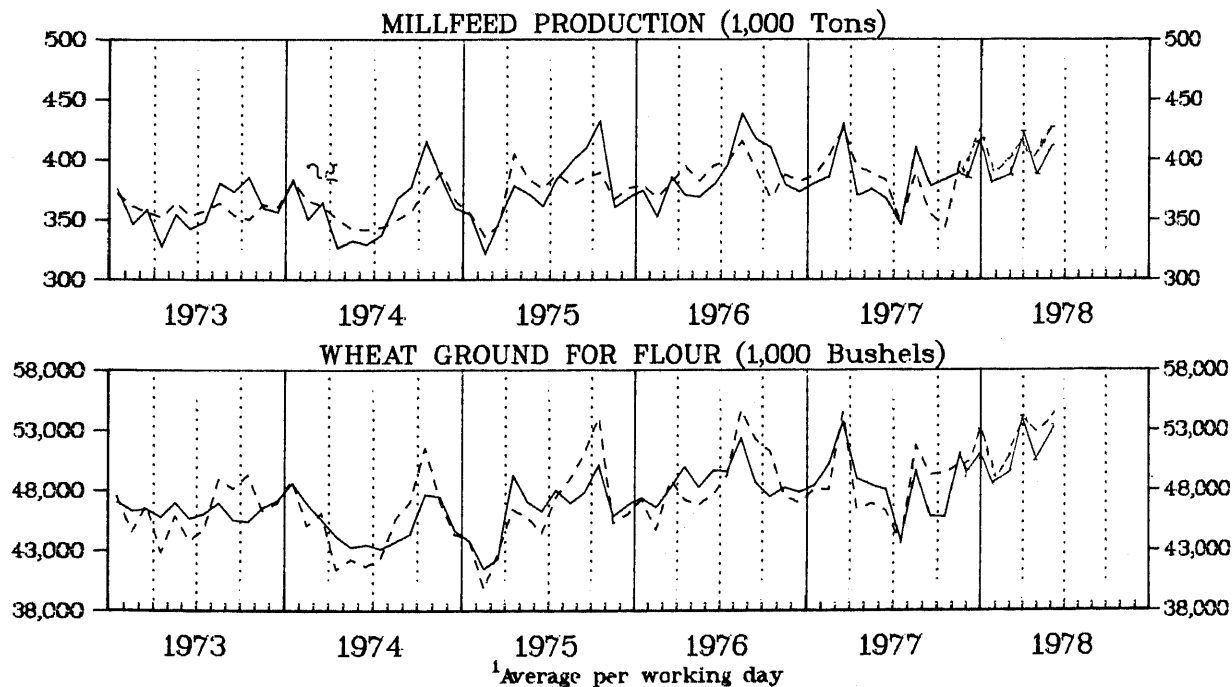
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THIS REPORT INCLUDES DATA COMPARING DOMESTIC OUTPUT, EXPORTS, AND IMPORTS

WHEAT FLOUR MILLING: 1973 TO 1978

----- Seasonally Adjusted
———— Not Seasonally Adjusted



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Table 1A.--SUMMARY OF WHEAT FLOUR MILLING: 1976 TO 1978

(Seasonally adjusted)

Month and year	Millfeed production (1,000 tons)	Wheat ground for flour (1,000 bushels)
1978		
May.....	430	55,311
April.....	409	53,191
March.....	426	54,064
February.....	404	51,054
January.....	388	48,870
1977		
December.....	421	53,169
November.....	398	51,034
October.....	343	45,796
September.....	355	45,821
August.....	389	49,628
July.....	346	43,693
June.....	382	48,088
May.....	389	48,419
April.....	393	48,949
March.....	426	53,682
February.....	404	50,128
January.....	387	48,374
1976		
December.....	382	47,848
November.....	387	48,209
October.....	368	47,466
September.....	392	48,672
August.....	415	52,331
July.....	398	49,569
June.....	395	49,630
May.....	382	48,254

See footnotes at end of table 1B.

Table 1B.--SUMMARY OF WHEAT FLOUR MILLING: 1976 TO 1978

(Not seasonally adjusted)

Month and year	Wheat flour production (1,000 cwt.)	Millfeed production (tons)	Wheat ground for flour (1,000 bushels)	Wheat flour mill stocks ¹ (1,000 cwt.)	Daily 24-hour capacity in wheat flour ¹ (1,000 cwt.)	Flour extraction rate ² (percent)
1978						
May.....	24,016	414,381	53,541	(NA)	1,009	74.8
April.....	22,554	385,227	50,478	(NA)	1,009	74.5
March.....	24,330	430,260	54,821	4,096	1,009	73.8
February.....	21,783	385,269	48,910	(NA)	1,017	74.2
January.....	21,787	380,717	48,430	(NA)	1,017	74.9
1977						
December.....	23,363	410,169	52,106	4,160	1,017	74.7
November.....	22,445	389,311	50,166	(NA)	968	74.6
October.....	22,054	382,730	49,360	(NA)	968	74.5
September.....	22,039	378,118	49,258	3,537	968	74.6
August.....	23,023	410,232	51,712	(NA)	957	74.2
July.....	19,393	344,584	43,518	(NA)	957	74.3
June.....	20,529	366,513	46,261	4,167	957	74.0
May.....	20,861	375,128	46,870	(NA)	976	74.2
April.....	20,632	369,798	46,402	(NA)	976	74.1
March.....	24,321	430,120	54,434	4,248	976	74.5
February.....	21,425	385,212	48,023	(NA)	990	74.4
January.....	21,320	380,273	48,035	(NA)	990	74.0
1976						
December.....	20,804	372,844	46,931	4,334	990	73.9
November.....	21,031	379,784	47,486	(NA)	980	73.8
October.....	22,723	410,072	51,216	(NA)	998	73.9
September.....	23,178	417,142	52,225	3,621	998	73.4
August.....	24,257	437,548	54,634	(NA)	990	74.0
July.....	21,751	395,596	49,272	(NA)	990	73.6
June.....	21,059	378,582	47,645	3,923	990	73.7
May.....	20,871	369,318	46,758	(NA)	997	74.4

(NA) Not available.

¹Collected quarterly.²Wheat flour production as compared with amount of wheat ground.

Table 2.--QUANTITY OF DURUM WHEAT AND RYE FLOUR PRODUCTION, GRAIN CONSUMPTION, MILL STOCKS, AND CAPACITY

Product code	Description of item	Unit of measure	May 1978	April 1978	May 1977
	DURUM WHEAT (Included in table 1 data):				
0011173	Durum wheat ground.....	M bu.....	240	2,237	2,657
2041153	Straight semolina durum flour.....	M cwt.....	1,045	993	1,125
2041155	Blended semolina durum flour.....	..do.....	(D)	(D)	(D)
	RYE:				
0011951	Rye ground for flour.....	M bu.....	293	284	272
2041611	Rye flour production.....	M cwt.....	146	126	126
2041618	Rye millfeed production....	Tons.....	1,410	1,591	1,396
2041611	Rye flour stocks ¹	M cwt.....	(NA)	(NA)	(NA)
	24 hour capacity ¹.....	..do.....	10	10	10

Note: Data include estimates for small mills. Detail may not add to total due to independent rounding. These data exclude all flour blended by macaroni and spaghetti manufacturers, etc., as such activities are not within scope of this survey. Only mills engaged in milling flour or meal are included in this survey.

(D) Withheld to avoid disclosure of figures for individual companies.

(NA) Not available.

¹Collected quarterly.

Table 3.--QUANTITY OF WHEAT GROUND FOR FLOUR AND WHEAT FLOUR PRODUCTION, BY DIVISIONS AND STATES

(Wheat ground for flour in thousands of bushels; wheat production in thousands of hundredweight)

Geographic area	May 1978		April 1978		May 1977	
	Wheat ground for flour	Wheat flour production	Wheat ground for flour	Wheat flour production	Wheat ground for flour	Wheat flour production
United States, total.....	53,541	24,016	50,478	22,554	46,870	20,861
Middle Atlantic.....	6,535	3,000	5,812	2,694	6,014	2,702
New York.....	5,137	2,380	4,549	2,125	4,895	2,211
North Central.....	29,100	12,981	28,057	12,517	25,773	11,450
Ohio.....	2,693	1,184	2,744	1,211	2,708	1,169
Indiana.....	1,123	497	1,266	569	1,064	454
Illinois.....	3,278	1,392	3,222	1,369	3,053	1,338
Michigan.....	919	381	902	344	761	333
Minnesota.....	6,136	2,795	5,672	2,579	5,329	2,428
Iowa.....	(D)	(D)	(D)	(D)	(D)	(D)
Missouri.....	4,523	2,034	4,263	1,912	4,415	1,960
Nebraska.....	(D)	(D)	(D)	(D)	1,451	638
Kansas.....	7,023	3,158	6,985	3,177	5,341	2,400
South Atlantic.....	3,036	1,346	2,934	1,316	2,781	1,189
East South Central.....	2,853	1,250	2,537	1,118	2,573	1,119
Tennessee.....	2,240	985	2,046	905	1,979	865
West South Central.....	3,829	1,678	3,637	1,542	2,944	1,325
Oklahoma.....	1,574	727	1,531	710	1,429	647
Texas.....	1,751	733	1,600	611	1,261	561
Mountain.....	2,986	1,367	2,918	1,291	2,592	1,162
Montana.....	763	366	627	288	612	288
Utah.....	(D)	(D)	(D)	597	(D)	(D)
Pacific.....	5,202	2,394	4,583	2,076	4,193	1,914
Washington.....	1,673	755	1,404	632	1,234	560
Oregon.....	799	349	769	324	724	318
California and Hawaii.....	2,730	1,290	2,410	1,120	2,235	1,036

Note: Detail may not add to total due to independent rounding.

(D) Withheld to avoid disclosure of figures for individual companies.

Table 4.--EXPORTS OF WHEAT AND WHEAT FLOUR

Country to which exported	April 1978	March 1978	4 months through April 1978
WHEAT FLOUR, EXCEPT MEAL AND GROATS, DONATED FOR RELIEF OR CHARITY (1314010 & 1314030) (1,000 cwt.)			
Total.....	251	130	711
Egypt.....	144	15	229
Guatemala.....	-	6	6
Colombia.....	-	7	16
Ecuador.....	-	-	2
Brazil.....	-	-	-
Israel.....	13	-	57
India.....	-	18	31
Chile.....	-	23	56
Sri Lanka (Ceylon).....	-	44	44
Philippine Republic.....	-	-	73
Morocco.....	55	22	77
Other.....	39	45	120
WHEAT FLOUR, WHOLLY U.S. WHEAT, EXCEPT DURUM FLOUR AND SEMOLINA ,1314040) (1,000 cwt.)			
Total.....	2,462	1,588	6,036
Nicaragua.....	2	-	4
Jamaica.....	10	26	299
Brazil.....	-	-	-
Iceland.....	-	2	12
Jordan.....	-	-	-
Saudi Arabia.....	459	127	1,109
Sri Lanka (Ceylon).....	396	-	396
Egypt.....	1,233	901	2,927
Philippine Republic.....	-	-	-
Korean Republic.....	-	-	-
Morocco.....	-	-	-
Other.....	362	532	1,289
WHEAT, INCLUDING SPELT OR MESLIN, UNMILLED, NOT DONATED FOR RELIEF OR CHARITY (1306540) (1,000 bu.)			
Total.....	101,821	103,316	364,243
U.S.S.R.....	23,075	12,307	62,180
Venezuela.....	1,140	2,050	6,282
Peru.....	2,723	944	3,667
Brazil.....	12,501	9,355	36,500
Portugal.....	1,157	3,999	11,271
Iran.....	3,691	3,535	16,043
Indonesia.....	220	1,242	2,417
Korean Republic.....	3,491	5,776	22,370
China (Taiwan).....	1,947	1,017	5,973
Japan.....	10,739	6,665	39,913
Egypt.....	4,777	7,211	17,011
Nigeria.....	2,735	1,981	8,932
Other.....	33,625	47,234	131,684

Note: Data in this table are taken from Foreign Trade publication FT410, U.S. Exports. The Schedule B codes are shown above.

- Represents zero.

Table 5.--PRODUCTION, EXPORTS, IMPORTS, AND APPARENT CONSUMPTION OF WHEAT PRODUCTION: APRIL 1978

Product	Quantity produced (1,000 cwt.)	Exports of domestic merchandise	Imports for consumption	Apparent consumption	Percent, imports to apparent consumption
Wheat flour.....	22,554	2,713	(X)	19,841	(X)

(X) Not applicable.

DESCRIPTION OF SURVEY

Scope of Survey—This survey covers firms engaged in the production of wheat and rye flour.

Sampling Description—The data shown in this publication were collected on Bureau of the Census monthly Form M20A, Flour Milling Products. The aggregates published in this report have been compiled from a sample of approximately 250 respondents, accounting for 98 percent of the total U.S. production of flour mill products. The universe for this sample was the 1958 Census of Manufactures. The reporting panel consists of mills with a daily capacity of over 400 sacks of flour. Approximately 200 small establishments are in the nonmail universe. Their production data are estimated based upon their 1958 Census of Manufactures report. The monthly reporting panel was selected by arraying the reporting units in descending order by size for each product line, then choosing a sufficient number of respondents (beginning with the largest) to yield a coverage of approximately 98 percent for each product line.

Data prior to December 1977, shown in this publication, are not comparable to the current data due to an extensive review and updating of the mailing panel. The revisions will be shown in the Summary for 1977 to be issued later this year.

Survey Error—The figures for the current month include estimates for respondents in the reporting panel whose reports were not received in time for tabulation, as well as for 200 small respondents excluded from the mail panel. Missing figures for companies in the reporting panel are “imputed” from the month-to-month movements shown by reporting firms. The overall imputation rate is generally limited to 12 percent, including about 2 percent for small respondents excluded from the monthly reporting panel. Individual items with imputation rates greater than 12-percent are footnoted.

The imputation rate is not an explicit indicator of the potential error in published figures due to nonresponse, both because the actual monthly movements for nonrespondents may or may not closely agree with the imputed movements, and because the estimates for nonpanel cases may or may not reflect their current activity. The probable difference between the actual and imputed figures is unknown. The degree of uncertainty regarding the accuracy of the data, however, increases as the percentage of imputation increases. Figures with imputation rates above 12 percent, particularly, should be used with caution.

Revision to Previous Period Data—Statistics for previous months may be revised due to receipt of corrected data from respondents, including late reports for which imputations were previously made as described above, and other corrections. Figures which have been revised by more than 5 percent from previously published figures are indicated by footnotes.

Reporting Period Adjustment—Since January 1975, the data have been adjusted for the number of working days in the reporting period in order to compensate for differences in individual company reporting patterns, i.e., calendar month, 4-week, 5-week periods.

Seasonal Adjustment—This report presents seasonally adjusted data in table 1A for selected series shown in table 1B. The data were seasonally adjusted using the X-11 variant of the Bureau of the Census Method II seasonal adjustment program. This seasonal adjustment program is a ratio-to-moving average method. The seasonal adjustment program largely eliminates the

effect of seasonal variations (intra-year variations repeated constantly from year to year) within the series. The seasonally adjusted data usually provide a better measure than the not seasonally adjusted (original) data of the month-to-month variations which are due to factors other than seasonal pattern.

EXPLANATION OF TERMS

Units of Quantity—Grain ground is measured in bushels of 60 pounds for wheat, and 56 pounds for rye. Flour production is measured in sacks of 100 pounds.

Capacity—Based on replies to the question, “What is the maximum quantity of flour that can be produced in your mill in one day if operated for 24 hours?”, the capacity of idle mills is included until the mills are reported to be destroyed, dismantled, or abandoned.

Grain—Represents the purchased weight of grain ground, including the weight of foreign material (dockage).

Millfeed—Includes bran, middlings, shorts, and other milling by products intended principally for use as feed materials.

Wheat Flour—Includes whole wheat flour, farina, industrial flour, and durum flour.

Stocks of Flour (quarterly)—Represents mill stocks in all positions, sold and unsold.

COMPARISON OF EXPORT, IMPORT, AND DOMESTIC OUTPUT DATA

Generally, it is somewhat easier to find a reasonable statistical basis for a comparison of exports with domestic output than for a comparison of imports with domestic output. Aside from the differences in the basic commodity classifications used, there are a substantial number of imported commodities which are not produced in the United States or are produced in very small quantities. On the other hand, the merchandise exported from the United States is ordinarily produced in this country and reflects items important in output.

There are other problems affecting the comparability of the three sets of data. Differences in methods of valuation is perhaps the principal such problem. There may be elements of duplication in output data but not in imports or exports; low-value transactions are excluded from data for individual export and import commodity classifications; and a small portion of manufacturing output is not allocated to detailed commodity lines. All of these factors affect comparability to some degree. For these reasons the relationships shown in this report should be considered as only approximations.

(a) *Valuation*—Domestic producers’ shipments, or production, are usually valued at the point of production—the factory, mine, or farm.

On the other hand, exports are by definition valued at the point of exportation—seaport, border point, or airport. Export values are the selling price, or cost if not sold, and include expenditures for freight, insurance, and other charges to the export point.

Further, the exporters’ trade margin above costs increases the export values compared with producers’ values. Information on the magnitude of this incremental margin on a commodity-by-commodity basis is not available.

The dollar value shown for imports in the basic statistics is defined ordinarily as the market value in the foreign country and excludes U.S. import duties, transportation, insurance, and

other costs. In actual practice only the values reported for imports subject to an ad valorem rate of duty (accounting for 10 to 15 percent of total imports) tend to conform to this definition. For other imports, the reported values may inadvertently include ocean freight; intracompany shipments may reflect arbitrary values; etc.

Thus, import values tend to understate the unit prices at which imported goods are sold in the U.S. market, in that they do not cover transportation, insurance costs, import duties, and other costs. By the same token, the total value of imports relative to domestic output tends to be understated if viewed at the point of entry into the U.S. market. The calculated value of import duties is shown separately for each commodity line in the table, but sufficient information is not available on the transportation, insurance, and other costs for individual commodities for those costs to be shown in this report.

(b) *Duplication in Quantity and Value of Output*—Because producers' shipments of some commodities may be used as materials for incorporation into other commodities, combinations of data for such commodities may contain a certain amount of duplication. Thus, percentages of exports to output or imports to apparent consumption (output plus imports minus exports) at 4-digit or broader levels may be understated.

Where the duplication is known to be substantial, the output data are appropriately noted in the table.

(c) *Low-Value Export and Import Transactions*—Commodity information is not shown for individual imports valued under \$251. For exports, commodity information is not reported for shipments individually valued under \$251 effective October 1969 and for shipments valued under \$100 prior to October 1969. This is believed to have only negligible effect on the statistics for the bulk of the commodities.

(d) *Manufacturers' Shipments, Not Specified by Kind*—The value of manufacturers' shipments at the 4-digit commodity level often includes a small amount which is not distributed among the individual 5-digit product classes. Export and import percentages at the more detailed levels might thus be slightly overstated.

(e) *Time Lag Between Output and Exports*—There will sometimes be a lag between the time a commodity is produced or shipped by the producer and the time it is actually exported. The time lag will usually be greater if the merchandise moves through intermediaries (wholesalers, exporters) rather than directly from producers into the export market. Ordinarily, this type of discrepancy would not be very important in annual figures.

(f) *"Direct" vs "Total" Commodity Exports*—The commodity export data in this report represent direct exports of

those commodities. They do not include the exports of the commodities which are incorporated into other, more finished products and exported in finished form. Thus, by showing only direct exports, the relation of exports to output for intermediate products, such as steel shapes and forms, is considerably understated. The figures for steel exported as such, does not include steel incorporated in automobiles, tractors, etc., which are also exported.

(g) *Used Commodities*—With a few exceptions, used or rebuilt commodities are classified in the same import or export codes as is new merchandise. Percentages are thus overstated to the extent that used or rebuilt products are significant in trade.

RELATED REPORTS

An annual current industrial report is published in this series. The annual report summarizes monthly figures and incorporates all known revisions in the series for both current and previous year, thus, providing a single reference copy to replace the monthly publications. This annual summary provides additional information on the history of this survey.

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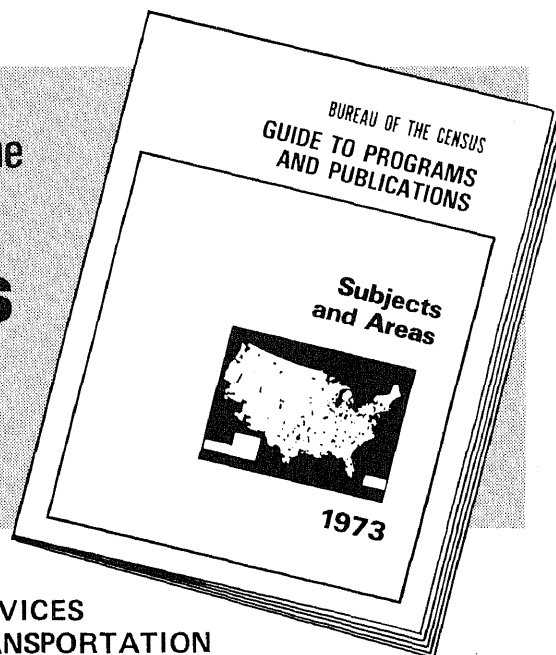
Foreign Trade Reports

FT-410	Monthly	U.S. Exports—Schedule B—Commodity by Country
FT-135	Monthly	U.S. General Imports—Schedule A—Commodity by Country

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Subject Area	Contact	Phone Number
Current Industrial Report M20A	Geraldine Bynum	(301) 763-7807
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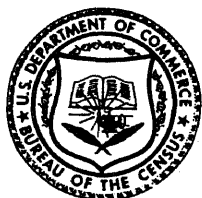
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Flour Milling Products



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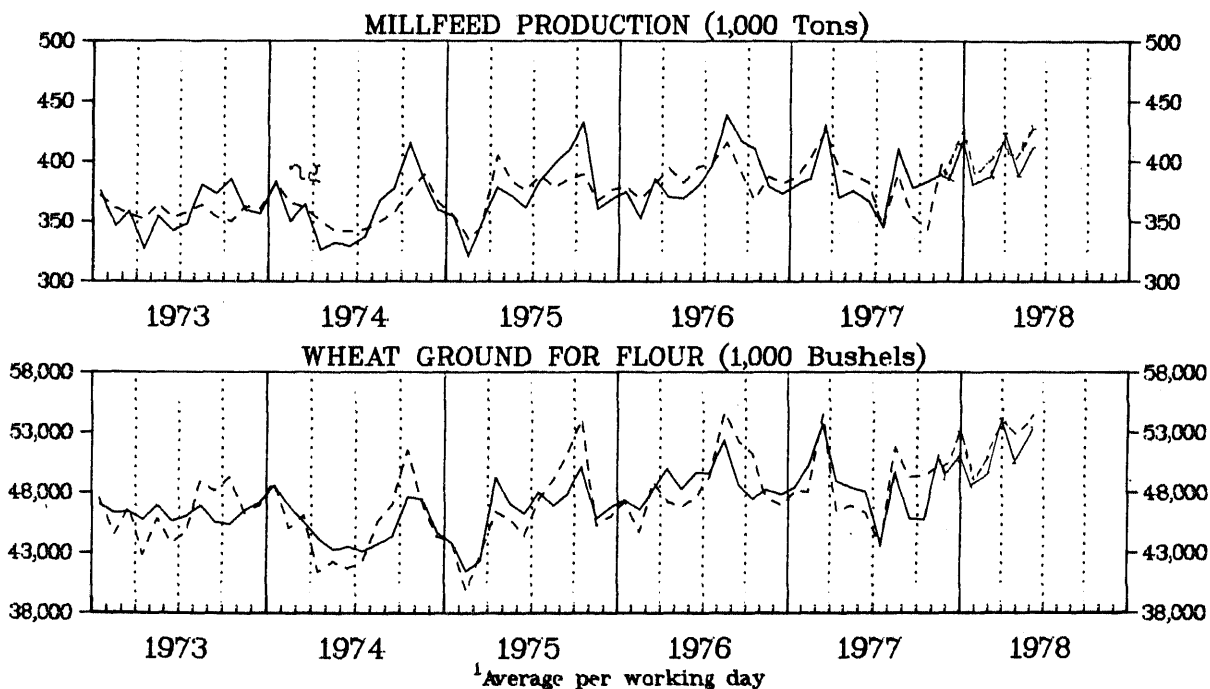
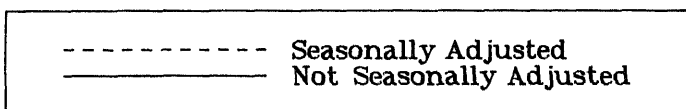
M20A(78)-6
Issued August 1978

The statistics in this publication are based on a survey of manufacturers and represent total U.S. production of flour milling products. Estimates are included for companies whose reports were not received in time for tabulation. A more com-

plete description of this survey appears on page 5. An annual current industrial report is published in this series. The annual report includes all the months for the current and previous years and incorporates all known revisions in the series.

THIS REPORT INCLUDES DATA COMPARING DOMESTIC OUTPUT, EXPORTS, AND IMPORTS

WHEAT FLOUR MILLING: 1973 TO 1978



Address inquiries concerning these figures to U.S. Department of Commerce, Bureau of the Census, Industry Division, Washington, D.C. 20233, or call Geraldine Bynum, (301) 763-7807.

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Table 1A. SUMMARY OF WHEAT FLOUR MILLING: 1976 TO 1978

(Seasonally adjusted)			
Month and year	Wheat flour production average per working day ¹ (1,000 cwt.)	Millfeed production (1,000 tons)	Wheat ground for flour (1,000 bushels)
1978			
June.....	1,097	420	53,644
May.....	1,101	433	55,373
April.....	1,173	409	53,191
March.....	1,099	426	54,064
February.....	1,071	404	51,054
January.....	1,061	388	48,870
1977			
December.....	1,187	421	53,169
November.....	1,089	398	51,034
October.....	983	343	45,796
September.....	954	355	45,821
August.....	985	389	49,628
July.....	1,004	346	43,693
June.....	976	382	48,088
May.....	1,002	389	48,419
April.....	1,024	393	48,949
March.....	1,079	426	53,682
February.....	1,057	404	50,128
January.....	1,027	387	48,374
1976			
December.....	922	382	47,848
November.....	974	387	48,209
October.....	1,014	368	47,466
September.....	946	392	48,672
August.....	988	415	52,331
July.....	1,005	398	49,569
June.....	998	395	49,630

See footnotes at end of table 1B.

Table 1B. SUMMARY OF WHEAT FLOUR MILLING: 1976 TO 1978

(Not seasonally adjusted)

Month and year	Wheat flour production (1,000 cwt.)		Millfeed production (tons)	Wheat ground for flour (1,000 bushels)	Wheat flour mill stocks ¹ (1,000 cwt.)	Daily 24-hour capacity in wheat flour ¹ (1,000 cwt.)	Wheat flour produced as percent of capacity	Flour extration rate ² (percent)
	Average per working day ¹	Calendar month total						
1978								
June.....	1,048	23,073	402,766	51,606	3,459	r ₁ 036	r ₁ 01.2	74.5
May.....	1,094	24,078	417,032	53,601	(NA)	r ₁ 034	r ₁ 05.8	74.8
April.....	1,127	22,554	385,227	50,478	(NA)	r ₁ 034	r ₁ 09.1	74.5
March.....	1,079	24,330	430,260	54,821	4,096	r ₁ 034	r ₁ 02.3	73.8
February.....	1,084	21,783	385,269	48,910	(NA)	r ₁ 061	r ₁ 02.6	74.2
January.....	1,038	21,787	380,717	48,430	(NA)	r ₁ 061	r ₁ 02.3	74.9
1977								
December.....	1,112	23,363	410,169	52,106	4,160	r ₁ 061	r ₁ 00.1	74.7
November.....	1,069	22,445	389,311	50,166	(NA)	r ₁ 053	r ₁ 01.5	74.6
October.....	1,050	22,054	382,730	49,360	(NA)	r ₁ 053	r ₁ 00.3	74.5
September.....	1,002	22,039	378,118	49,258	3,537	r ₁ 053	r ₁ 05.1	74.6
August.....	1,001	23,023	410,232	51,712	(NA)	r ₁ 047	r ₁ 04.6	74.2
July.....	970	19,393	344,584	43,518	(NA)	r ₁ 047	r ₁ 13.4	74.3
June.....	933	20,529	366,513	46,261	4,167	r ₁ 047	r ₁ 12.2	74.0
May.....	993	20,861	375,128	46,870	(NA)	r ₁ 063	r ₁ 12.1	74.2
April.....	982	20,632	369,798	46,402	(NA)	r ₁ 063	r ₁ 08.1	74.1
March.....	1,057	24,321	430,120	54,434	4,248	r ₁ 063	r ₁ 00.9	74.5
February.....	1,071	21,425	385,212	48,023	(NA)	r ₁ 999	r ₁ 07.2	74.4
January.....	1,015	21,320	380,273	48,035	(NA)	r ₁ 999	r ₁ 01.6	74.0
1976								
December.....	905	20,804	372,844	46,931	4,334	990	91.4	73.9
November.....	1,001	21,031	379,784	47,486	(NA)	980	100.3	73.8
October.....	1,082	22,723	410,072	51,216	(NA)	998	108.4	73.9
September.....	1,053	23,178	417,142	52,225	3,621	998	105.5	73.4
August.....	1,103	24,257	437,548	54,634	(NA)	990	111.4	74.0
July.....	987	21,751	395,596	49,272	(NA)	990	100.1	73.6
June.....	957	21,059	378,582	47,645	3,923	990	96.7	73.7

Note: Data include estimate for small mills. The data shown for 1976 and 1977 exclude a number of plants that began operations during this period. These companies account for approximately 5-8 percent of our 1977 estimates. Revised monthly data will be shown in the annual summary to be released in early 1978. Data for January 1978 will include the production for these companies.

(NA) Not available. ¹These data, as shown for 1977 and 1978, are revised. Data for 1976 and prior years are understated by approximately 3 to 5 percent.

¹The number of working days per month is computed on the basis of a 5-day week with allowances for the following holidays: January 1, Memorial Day, Independence day, Thanksgiving Day, and December 25. ²Collected quarterly. ³Wheat flour production as compared with amount of wheat ground.

Table 2. QUANTITY OF DURUM WHEAT AND RYE FLOUR PRODUCTION, GRAIN CONSUMPTION, MILL STOCKS, AND CAPACITY

Product code	Description of item	Unit of measure	June 1978	May 1978	June 1977
	DURUM WHEAT (included in table 1 data):				
0011173	Durum wheat ground.....	M bu.....	2,362	2,591	2,781
2041153	Straight semolina durum flour.....	M cwt.....	1,028	1,127	1,245
2041155	Blended semolina durum flour.....	..do.....	(D)	(D)	(D)
	RYE:				
0011951	Rye ground for flour.....	M bu.....	298	293	277
2041611	Rye flour production.....	M cwt.....	137	146	131
2041618	Rye millfeed production...	Tons.....	1,712	1,544	1,389
2041611	Rye flour stocks ¹	M cwt.....	23	(NA)	21
	24 hour capacity ¹.....	..do.....	10	10	10

Note: Data include estimates for small mills. Detail may not add to total due to independent rounding. These data exclude all flour blended by macaroni and spaghetti manufacturers, etc., as such activities are not within scope of this survey. Only mills engaged in milling flour or meal are included in this survey.

(D) Withheld to avoid disclosure of figures for individual companies. (NA) Not available.

¹Collected quarterly.

Table 3. QUANTITY OF WHEAT GROUND FOR FLOUR AND WHEAT FLOUR PRODUCTION, BY DIVISIONS AND STATES

(Wheat ground for flour in thousands of bushels; wheat production in thousands of hundredweight)

Geographic area	June 1978		May 1978		June 1977	
	Wheat ground for flour	Wheat flour production	Wheat ground for flour	Wheat flour production	Wheat ground for flour	Wheat flour production
United States, total.....	51,606	23,073	53,601	24,078	46,261	20,529
Middle Atlantic.....	6,773	3,110	6,700	3,028	6,194	2,781
New York.....	5,501	2,549	5,132	2,330	5,213	2,353
North Central.....	27,700	12,388	29,045	13,036	25,324	11,204
Ohio.....	2,508	1,080	2,689	1,184	2,474	1,052
Indiana.....	1,093	477	1,068	466	1,291	547
Illinois.....	2,684	1,176	3,228	1,443	2,975	1,295
Michigan.....	917	399	870	373	765	337
Minnesota.....	5,996	2,732	6,136	2,795	5,715	2,602
Iowa.....	(D)	(D)	(D)	(D)	(D)	(D)
Missouri.....	4,559	2,042	4,523	2,034	4,189	1,862
Nebraska.....	(D)	(D)	(D)	(D)	1,276	556
Kansas.....	6,784	3,061	7,051	3,169	5,068	2,265
South Atlantic.....	3,054	1,328	3,062	1,355	2,667	1,134
East South Central.....	2,649	1,168	2,791	1,222	2,628	1,136
Tennessee.....	2,103	929	2,178	957	2,109	915
West South Central.....	3,868	1,671	3,827	1,677	3,029	1,354
Oklahoma.....	1,560	717	1,574	727	1,358	615
Texas.....	1,700	688	1,749	732	1,413	622
Mountain.....	2,861	1,292	2,986	1,367	2,564	1,153
Montana.....	655	301	763	366	552	266
Utah.....	(D)	(D)	(D)	(D)	(D)	(D)
Pacific.....	4,701	2,116	5,190	2,393	3,855	1,767
Washington.....	1,306	581	1,673	755	1,096	497
Oregon.....	901	396	799	349	692	310
California and Hawaii.....	2,494	1,139	2,718	1,289	2,067	960

Note: Detail may not add to total due to independent rounding.

(D) Withheld to avoid disclosure of figures for individual companies.

Table 4. EXPORTS OF WHEAT AND WHEAT FLOUR

Country to which exported	May 1978	April 1978	5 months through May 1978
WHEAT FLOUR, EXCEPT MEAL AND GROATS, DONATED FOR RELIEF OR CHARITY (1314010 & 1314030) (1,000 cwt.)			
Total.....	260	251	971
Egypt.....	9	144	238
Guatemala.....	-	-	6
Colombia.....	-	-	16
Ecuador.....	-	-	2
Brazil.....	1	-	1
Israel.....	31	13	88
India.....	24	-	55
Chile.....	8	-	64
Sri Lanka (Ceylon).....	-	-	44
Philippine Republic.....	93	-	166
Morocco.....	22	55	99
Other.....	72	39	192
WHEAT FLOUR, WHOLLY U.S. WHEAT, EXCEPT DURUM FLOUR AND SEMOLINA (1314040) (1,000 cwt.)			
Total.....	1,885	2,462	7,921
Nicaragua.....	2	2	6
Jamaica.....	-	10	299
Brazil.....	-	-	-
Iceland.....	-	-	12
Jordan.....	-	-	-
Saudi Arabia.....	223	459	1,332
Sri Lanka (Ceylon).....	1,312	396	1,708
Egypt.....	178	1,233	3,105
Philippine Republic.....	-	-	-
Korean Republic.....	-	-	-
Morocco.....	-	-	-
Other.....	170	362	1,459
WHEAT, INCLUDING SPELT OR MESLIN, UNMILLED, NOT DONATED FOR RELIEF OR CHARITY (1306540) (1,000 bu.)			
Total.....	118,842	101,821	483,085
U.S.S.R.....	5,854	23,075	68,034
Venezuela.....	3,076	1,140	9,358
Peru.....	1,932	2,723	5,599
Brazil.....	21,394	12,501	57,894
Portugal.....	772	1,157	12,043
Iran.....	4,852	3,691	20,895
Indonesia.....	771	220	3,188
Korean Republic.....	4,853	3,491	27,223
China (Taiwan).....	3,932	1,947	9,905
Japan.....	10,267	10,739	50,180
Egypt.....	5,089	4,777	22,100
Nigeria.....	3,259	2,735	12,191
Other.....	52,791	33,625	184,475

Note: Data in this table are taken from Foreign Trade publication FT410, U.S. Exports. The Schedule B codes are shown above.

- Represents zero.

Table 5. PRODUCTION, EXPORTS, IMPORTS AND APPARENT CONSUMPTION OF WHEAT PRODUCTION: MAY 1978

(Quantity in 1,000 cwt., value in thousands of dollars)

Product	Manufacturers' production		Export of domestic merchandise ¹		Percent exports to manufacturers' shipments		Imports for consumption ²		Calculated import duty	Apparent consumption ³	
	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value		Quantity	Value
Wheat flour.....	24,078	(NA)	2,145	16,553	8.9	(NA)	-	-	-	21,933	(NA)

Note: Comparison of Standard Industrial Classification codes Schedule B export numbers, and TSUSA import numbers is as follows:

Domestic output	Exports	Imports
20411	131.4010-131.4040	-

- Represents zero. (NA) Not available.

¹Source: Bureau of the Census report FT-410, U.S. Exports, Commodity by Country.

²Source: Bureau of the Census report IM-146, Imports for Consumption.

³Apparent consumption represents domestic production plus imports minus exports.

DESCRIPTION OF SURVEY

Scope of Survey—This survey covers firms engaged in the production of wheat and rye flour.

Sampling Description—The data shown in this publication were collected on Bureau of the Census monthly Form M20A, Flour Milling Products. The aggregates published in this report have been compiled from a sample of approximately 250 respondents, accounting for 98 percent of the total U.S. production of flour mill products. The universe for this sample was the 1958 Census of Manufactures. The reporting panel consists of mills with a daily capacity of over 400 sacks of flour. Approximately 200 small establishments are in the nonmail universe. Their production data are estimated based upon their 1958 Census of Manufactures report. The monthly reporting panel was selected by arraying the reporting units in descending order by size for each product line, then choosing a sufficient number of respondents (beginning with the largest) to yield a coverage of approximately 98 percent for each product line.

Data prior to December 1977, shown in this publication, are not comparable to the current data due to an extensive review and updating of the mailing panel. The revisions will be shown in the Summary for 1977 to be issued later this year.

Survey Error—The figures for the current month include estimates for respondents in the reporting panel whose reports were not received in time for tabulation, as well as for 200 small respondents excluded from the mail panel. Missing figures for companies in the reporting panel are "imputed" from the month-to-month movements shown by reporting firms. The overall imputation rate is generally limited to 12 percent, including about 2 percent for small respondents excluded from the monthly reporting panel. Individual items with imputation rates greater than 12-percent are footnoted.

The imputation rate is not an explicit indicator of the potential error in published figures due to nonresponse, both because the actual monthly movements for nonrespondents may or may not closely agree with the imputed movements, and because the estimates for nonpanel cases may or may not reflect their current activity. The probable difference between the actual and imputed figures is unknown. The degree of uncertainty regarding the accuracy of the data, however, increases as the percentage of imputation increases. Figures with imputation rates above 12 percent, particularly, should be used with caution.

Revision to Previous Period Data—Statistics for previous months may be revised due to receipt of corrected data from respondents, including late reports for which imputations were previously made as described above, and other corrections. Figures which have been revised by more than 5 percent from previously published figures are indicated by footnotes.

Reporting Period Adjustment—Since January 1975, the data have been adjusted for the number of working days in the reporting period in order to compensate for differences in individual company reporting patterns, i.e., calendar month, 4-week, 5-week periods.

Seasonal Adjustment—This report presents seasonally adjusted data in table 1A for selected series shown in table 1B. The data were seasonally adjusted using the X-11 variant of the Bureau of the Census Method II seasonal adjustment program. This seasonal adjustment program is a ratio-to-moving average method. The seasonal adjustment program largely eliminates the

effect of seasonal variations (intra-year variations repeated constantly from year to year) within the series. The seasonally adjusted data usually provide a better measure than the not seasonally adjusted (original) data of the month-to-month variations which are due to factors other than seasonal pattern.

EXPLANATION OF TERMS

Units of Quantity—Grain ground is measured in bushels of 60 pounds for wheat, and 56 pounds for rye. Flour production is measured in sacks of 100 pounds.

Capacity—Based on replies to the question, "What is the maximum quantity of flour that can be produced in your mill in one day if operated for 24 hours?", the capacity of idle mills is included until the mills are reported to be destroyed, dismantled, or abandoned.

Grain—Represents the purchased weight of grain ground, including the weight of foreign material (dockage).

Millfeed—Includes bran, middlings, shorts, and other milling by products intended principally for use as feed materials.

Wheat Flour—Includes whole wheat flour, farina, industrial flour, and durum flour.

Stocks of Flour (quarterly)—Represents mill stocks in all positions, sold and unsold.

COMPARISON OF EXPORT, IMPORT, AND DOMESTIC OUTPUT DATA

Generally, it is somewhat easier to find a reasonable statistical basis for a comparison of exports with domestic output than for a comparison of imports with domestic output. Aside from the differences in the basic commodity classifications used, there are a substantial number of imported commodities which are not produced in the United States or are produced in very small quantities. On the other hand, the merchandise exported from the United States is ordinarily produced in this country and reflects items important in output.

There are other problems affecting the comparability of the three sets of data. Differences in methods of valuation is perhaps the principal such problem. There may be elements of duplication in output data but not in imports or exports; low-value transactions are excluded from data for individual export and import commodity classifications; and a small portion of manufacturing output is not allocated to detailed commodity lines. All of these factors affect comparability to some degree. For these reasons the relationships shown in this report should be considered as only approximations.

(a) *Valuation*—Domestic producers' shipments, or production, are usually valued at the point of production—the factory, mine, or farm.

On the other hand, exports are by definition valued at the point of exportation—seaport, border point, or airport. Export values are the selling price, or cost if not sold, and include expenditures for freight, insurance, and other charges to the export point.

Further, the exporters' trade margin above costs increases the export values compared with producers' values. Information on the magnitude of this incremental margin on a commodity-by-commodity basis is not available.

The dollar value shown for imports in the basic statistics is defined ordinarily as the market value in the foreign country and excludes U.S. import duties, transportation, insurance, and

other costs. In actual practice only the values reported for imports subject to an ad valorem rate of duty (accounting for 10 to 15 percent of total imports) tend to conform to this definition. For other imports, the reported values may inadvertently include ocean freight; intracompany shipments may reflect arbitrary values; etc.

Thus, import values tend to understate the unit prices at which imported goods are sold in the U.S. market, in that they do not cover transportation, insurance costs, import duties, and other costs. By the same token, the total value of imports relative to domestic output tends to be understated if viewed at the point of entry into the U.S. market. The calculated value of import duties is shown separately for each commodity line in the table, but sufficient information is not available on the transportation, insurance, and other costs for individual commodities for those costs to be shown in this report.

(b) *Duplication in Quantity and Value of Output*—Because producers' shipments of some commodities may be used as materials for incorporation into other commodities, combinations of data for such commodities may contain a certain amount of duplication. Thus, percentages of exports to output or imports to apparent consumption (output plus imports minus exports) at 4-digit or broader levels may be understated.

Where the duplication is known to be substantial, the output data are appropriately noted in the table.

(c) *Low-Value Export and Import Transactions*—Commodity information is not shown for individual imports valued under \$251. For exports, commodity information is not reported for shipments individually valued under \$251 effective October 1969 and for shipments valued under \$100 prior to October 1969. This is believed to have only negligible effect on the statistics for the bulk of the commodities.

(d) *Manufacturers' Shipments, Not Specified by Kind*—The value of manufacturers' shipments at the 4-digit commodity level often includes a small amount which is not distributed among the individual 5-digit product classes. Export and import percentages at the more detailed levels might thus be slightly overstated.

(e) *Time Lag Between Output and Exports*—There will sometimes be a lag between the time a commodity is produced or shipped by the producer and the time it is actually exported. The time lag will usually be greater if the merchandise moves through intermediaries (wholesalers, exporters) rather than directly from producers into the export market. Ordinarily, this type of discrepancy would not be very important in annual figures.

(f) *"Direct" vs "Total" Commodity Exports*—The commodity export data in this report represent direct exports of

those commodities. They do not include the exports of the commodities which are incorporated into other, more finished products and exported in finished form. Thus, by showing only direct exports, the relation of exports to output for intermediate products, such as steel shapes and forms, is considerably understated. The figures for steel exported as such, does not include steel incorporated in automobiles, tractors, etc., which are also exported.

(g) *Used Commodities*—With a few exceptions, used or rebuilt commodities are classified in the same import or export codes as is new merchandise. Percentages are thus overstated to the extent that used or rebuilt products are significant in trade.

RELATED REPORTS

An annual current industrial report is published in this series. The annual report summarizes monthly figures and incorporates all known revisions in the series for both current and previous year, thus, providing a single reference copy to replace the monthly publications. This annual summary provides additional information on the history of this survey.

The Bureau of the Census also publishes reports on related products as follows:

Series	Frequency	Title
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Current Industrial Reports

M3-1	Monthly	Manufacturers' Shipments, Inventories, and Orders
M20C	Monthly	Confectionery, Including Chocolate Products

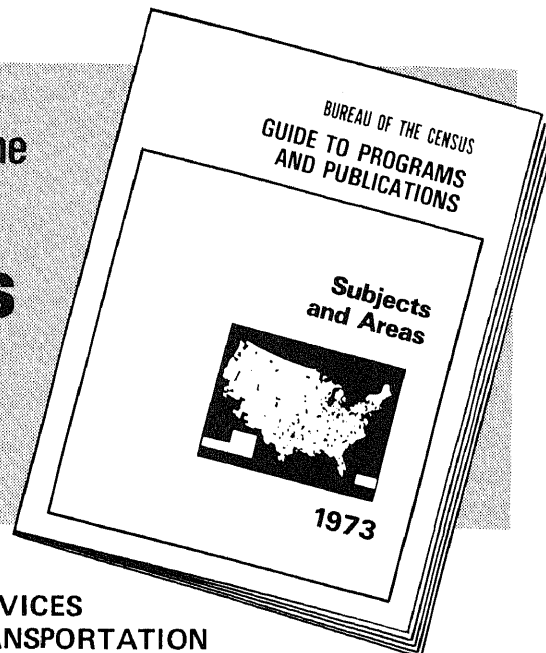
Foreign Trade Reports

FT-410	Monthly	U.S. Exports—Schedule B—Commodity by Country
FT-135	Monthly	U.S. General Imports—Schedule A—Commodity by Country

CONTACTS FOR DATA USERS

Subject Area	Contact	Phone Number
Current Industrial Report M20A	Geraldine Bynum	(301) 763-7807
Foreign Trade publications	Juanita Noone	(301) 763-5140
To order a Census publication	Daisy Williams	(301) 763-7472
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Flour Milling Products



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JULY 1978

M20A(78)-7
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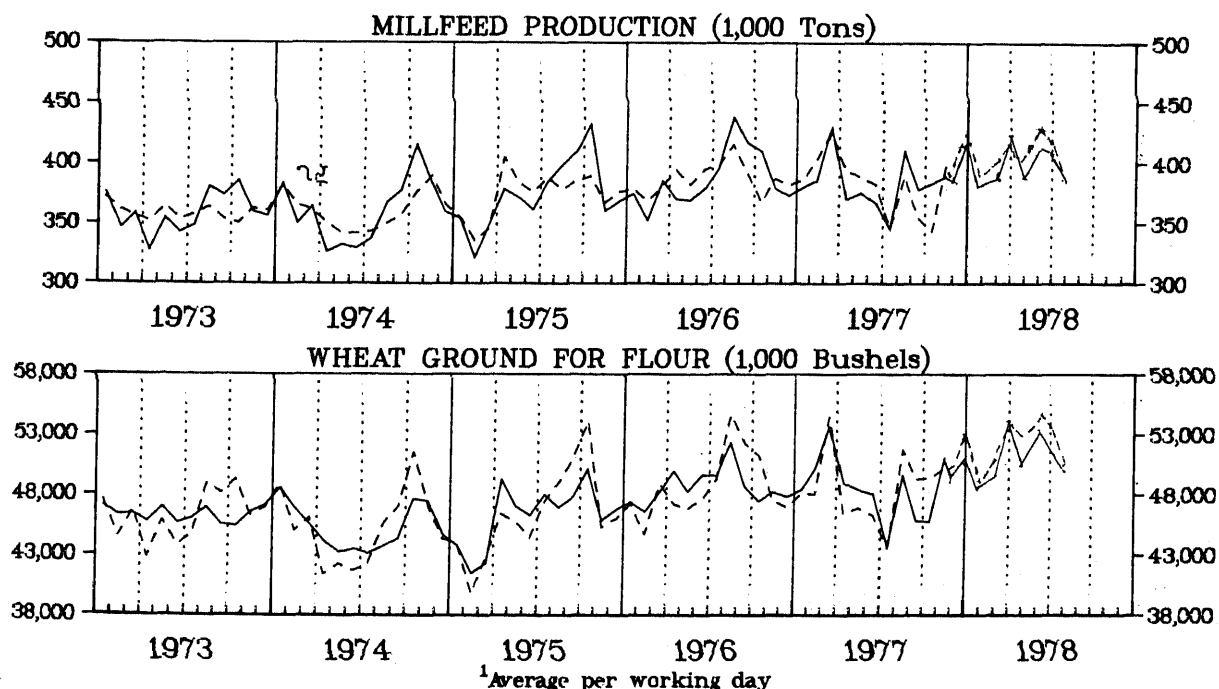
The statistics in this publication are based on a survey of manufacturers and represent total U.S. production of flour milling products. Estimates are included for companies whose reports were not received in time for tabulation. A more

complete description of this survey appears on page 5. An annual Current Industrial Report is published in this series. The annual report includes all the months for the current and previous years and incorporates all known revisions in the series.

THIS REPORT INCLUDES DATA COMPARING DOMESTIC OUTPUT, EXPORTS, AND IMPORTS

WHEAT FLOUR MILLING: 1973 TO 1978

----- Seasonally Adjusted
———— Not Seasonally Adjusted



Address inquiries concerning these figures to U.S. Department of Commerce, Bureau of the Census, Industry Division, Washington, D.C. 20233, or call Geraldine Bynum, (301) 763-7807.

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Table 1A. SUMMARY OF WHEAT FLOUR MILLING: 1976 TO 1978

(Seasonally adjusted)			
Month and year	Wheat flour production average per working day ¹ (1,000 cwt.)	Millfeed production (1,000 tons)	Wheat ground for flour (1,000 bushels)
1978			
July.....	1,102	388	50,105
June.....	1,096	419	53,580
May.....	1,101	423	55,373
April.....	1,173	409	53,191
March.....	1,077	426	54,064
February.....	1,076	404	51,054
January.....	1,003	388	48,870
1977			
December.....	1,085	421	53,169
November.....	1,039	398	51,034
October.....	983	343	45,796
September.....	1,003	355	45,821
August.....	985	389	49,628
July.....	1,004	346	43,693
June.....	977	382	48,088
May.....	999	389	48,419
April.....	1,022	393	48,949
March.....	1,077	426	53,682
February.....	1,058	404	50,128
January.....	1,028	387	48,374
1976			
December.....	922	382	47,848
November.....	974	387	48,209
October.....	1,014	368	47,466
September.....	946	392	48,672
August.....	988	415	52,331
July.....	1,005	398	49,569

¹The number of working days per month is computed on the basis of a 5-day week with allowances for the following holidays: January 1, Memorial Day, Independence Day, Thanksgiving Day, and December 25.

Table 1B. SUMMARY OF WHEAT FLOUR MILLING: 1976 TO 1978

(Not seasonally adjusted)								
Month and year	Wheat flour production (1,000 cwt.)		Millfeed production (tons)	Wheat ground for flour (1,000 bushels)	Wheat flour mill stocks ¹ (1,000 cwt.)	Daily 24-hour capacity in wheat flour ¹ (1,000 cwt.)	Wheat flour produced as percent of capacity	Flour extraction rate ² (percent)
	Average per working day ¹	Calendar month total						
1978								
July.....	1,065	22,376	388,090	50,005	(NA)	1,036	102.8	74.6
June.....	1,047	23,051	401,878	51,544	3,459	1,036	101.1	74.5
May.....	1,094	24,078	417,032	53,601	(NA)	1,034	105.8	74.5
April.....	1,127	22,554	385,227	50,478	(NA)	1,034	109.1	74.5
March.....	^r 1,057	24,330	430,260	54,821	4,096	1,034	102.3	73.8
February.....	^r 1,089	21,738	385,269	48,910	(NA)	1,061	102.6	74.2
January.....	^r 990	21,787	380,717	48,430	(NA)	1,061	^r 93.3	74.9
1977								
December.....	^r 1,062	23,363	410,169	52,106	4,160	1,061	100.1	74.7
November.....	1,069	22,445	389,311	50,166	(NA)	1,053	101.5	74.6
October.....	1,050	22,054	382,730	49,360	(NA)	1,053	^r 99.7	74.5
September.....	^r 1,049	22,039	378,118	49,258	3,537	1,053	^r 99.7	74.6
August.....	1,001	23,023	410,232	51,712	(NA)	1,047	^r 95.6	74.2
July.....	970	19,393	344,584	43,518	(NA)	1,047	^r 92.6	74.3
June.....	933	20,529	366,513	46,261	4,167	1,047	^r 89.1	74.0
May.....	993	20,861	375,128	46,870	(NA)	1,063	^r 93.5	74.2
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October.....	1,082	22,723	410,072	51,216	(NA)	998	108.4	73.9
September.....	1,053	23,178	417,142	52,225	3,621	998	105.5	73.4
August.....	1,103	24,257	437,548	54,634	(NA)	990	111.4	74.0
July.....	989	21,751	395,596	49,272	(NA)	990	100.1	73.6

Note: Data include estimate for small mills. The data shown for 1976 and 1977 exclude a number of plants that began operations during this period. These companies account for approximately 5-8 percent of our 1977 estimates. Revised monthly data will be shown in the annual summary to be released in early 1978. Data for January 1978 will include the production for these companies.

(NA) Not available.

¹The number of working days per month is computed on the basis of a 5-day week with allowances for the following holidays: January 1, Memorial Day, Independence Day, Thanksgiving Day, and December 25. ²Collected quarterly. ³Wheat flour production as compared with amount of wheat ground.

Table 2. QUANTITY OF DURUM WHEAT AND RYE FLOUR PRODUCTION, GRAIN CONSUMPTION, MILL STOCKS, AND CAPACITY

Product code	Description of item	Unit of measure	July 1978	June 1978	July 1977
	Durum wheat (included in table 1 data):				
0011173	Durum wheat ground.....	M bu.....	2,225	2,362	2,601
2041153	Straight semolina durum flour.....	M cwt.....	961	1,028	1,147
2041155	Blended semolina durum flour.....	..do.....	(D)	(D)	(D)
	Rye:				
0011951	Rye ground for flour.....	M bu.....	260	298	263
2041611	Rye flour production.....	M cwt.....	114	137	125
2041618	Rye millfeed production....	Tons.....	1,308	1,712	1,377
2041611	Rye flour stocks ¹	M cwt.....	(NA)	22	(NA)
	24 hour capacity ¹.....	..do.....	9	10	10

Note: Data include estimates for small mills. Detail may not add to total due to independent rounding. These data exclude all flour blended by macaroni and spaghetti manufacturers, etc., as such activities are not within scope of this survey. Only mills engaged in milling flour or meal are included in this survey.

(D) Withheld to avoid disclosure of figures for individual companies. (NA) Not available.

¹Collected quarterly.

Table 3. QUANTITY OF WHEAT GROUND FOR FLOUR AND WHEAT FLOUR PRODUCTION, BY DIVISIONS AND STATES

(Wheat ground for flour in thousands of bushels; wheat production in thousands of hundredweight)

Geographic area	July 1978		June 1978		July 1977	
	Wheat ground for flour	Wheat flour production	Wheat ground for flour	Wheat flour production	Wheat ground for flour	Wheat flour production
United States, total.....	50,005	22,376	51,544	23,051	43,518	19,393
Middle Atlantic.....	6,770	3,114	6,771	3,110	5,628	2,525
New York.....	5,585	2,593	5,508	2,549	4,775	2,153
North Central.....	26,737	12,017	27,584	12,352	24,016	10,705
Ohio.....	2,500	1,080	2,420	1,049	2,537	1,085
Indiana.....	1,202	525	1,093	477	1,201	510
Illinois.....	2,838	1,253	2,684	1,176	2,666	1,158
Michigan.....	757	324	917	399	692	303
Minnesota.....	5,326	2,434	5,996	2,732	5,466	2,516
Iowa.....	(D)	(D)	(D)	(D)	(D)	(D)
Missouri.....	4,809	2,151	4,559	2,044	3,976	1,757
Nebraska.....	(D)	(D)	(D)	(D)	1,073	469
Kansas.....	6,226	2,799	6,756	3,054	4,951	2,259
South Atlantic.....	3,059	1,336	3,110	1,342	2,372	1,011
East South Central.....	2,416	1,063	2,649	1,168	2,417	1,040
Tennessee.....	1,840	815	2,103	929	1,846	802
West South Central.....	3,647	1,576	3,868	1,671	2,693	1,214
Oklahoma.....	1,423	651	1,560	717	1,285	585
Texas.....	1,628	664	1,700	688	1,274	569
Mountain.....	2,707	1,212	2,861	1,292	2,628	1,177
Montana.....	561	258	655	301	581	274
Utah.....	(D)	(D)	(D)	(D)	(D)	(D)
Pacific.....	4,668	2,125	4,701	2,116	3,764	1,721
Washington.....	1,304	583	1,306	581	1,133	511
Oregon.....	963	428	901	396	662	295
California and Hawaii.....	2,401	1,114	2,494	1,139	1,969	915

Note: Detail may not add to total due to independent rounding.

(D) Withheld to avoid disclosure of figures for individual companies.

Table 4. EXPORTS OF WHEAT AND WHEAT FLOUR

Country to which exported	June 1978	May 1978	6 months through June 1978
WHEAT FLOUR, EXCEPT MEAL AND GROATS, DONATED FOR RELIEF OR CHARITY (1314010 & 1314030) (1,000 cwt.)			
Total.....	123	260	1,094
Egypt.....	-	9	238
Guatemala.....	-	-	6
Colombia.....	1	-	17
Ecuador.....	-	-	2
Brazil.....	-	1	1
Israel.....	-	31	88
India.....	-	24	55
Chile.....	-	8	64
Sri Lanka (Ceylon).....	4	-	48
Philippine Republic.....	36	93	202
Morocco.....	43	22	142
Other.....	39	72	231
WHEAT FLOUR, WHOLLY U.S. WHEAT, EXCEPT DURUM FLOUR AND SEMOLINA (1314040) (1,000 cwt.)			
Total.....	2,442	1,885	10,363
Nicaragua.....	2	2	8
Jamaica.....	53	-	352
Brazil.....	-	-	-
Iceland.....	-	-	12
Jordan.....	-	-	-
Saudi Arabia.....	541	223	1,873
Sri Lanka (Ceylon).....	314	1,312	2,022
Egypt.....	7,347	178	4,452
Philippine Republic.....	-	-	-
Korean Republic.....	-	-	-
Morocco.....	-	-	-
Other.....	185	170	1,644
WHEAT, INCLUDING SPELT OR MESLIN, UNMILLED, NOT DONATED FOR RELIEF OR CHARITY (1306540) (1,000 bu.)			
Total.....	108,830	118,842	591,915
U.S.S.R.....	5,103	5,854	73,137
Venezuela.....	3,694	3,076	13,052
Peru.....	1,901	1,932	7,500
Brazil.....	14,270	21,394	72,164
Portugal.....	411	772	12,454
Iran.....	6,582	4,852	27,477
Indonesia.....	3,542	771	6,730
Korean Republic.....	4,000	4,853	31,223
China (Taiwan).....	236	3,932	10,141
Japan.....	9,880	10,267	60,060
Egypt.....	5,075	5,089	27,175
Nigeria.....	2,381	3,259	14,572
Other.....	51,755	52,791	236,230

Note: Data in this table are taken from Foreign Trade publication FT-410, U.S. Exports. The Schedule B codes are shown above.

- Represents zero.

Table 5. PRODUCTION, EXPORTS, IMPORTS AND APPARENT CONSUMPTION OF WHEAT PRODUCTION: JUNE 1978

(Quantity in 1,000 cwt., value in thousands of dollars)

Product	Manufacturers' shipments		Export of domestic merchandise ¹		Percent exports to manufacturers' shipments		Imports for consumption ²		Calculated import duty	Apparent consumption ⁴	
	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value ³		Quantity	Value
Wheat flour.....	23,051	(NA)	2,565	23,356	9.0	(NA)	-	-	-	20,486	(NA)

Note: Comparison of Standard Industrial Classification codes Schedule B Export numbers, and TSUSA import numbers is as follows:

Domestic output	Exports	Imports
20411	131.4010-131.4040	-

- Represents zero. (NA) Not available.

¹Source: Bureau of Census report FT-410, U.S. Exports, Commodity by Country.

²Source: Bureau of the Census report IM-146, Imports for Consumption.

³This dollar value represents the c.i.f. (cost, insurance, and freight) value at first port of entry in the United States plus U.S. import duties.

⁴Apparent consumption represents domestic production plus imports minus exports.

DESCRIPTION OF SURVEY

Scope of Survey—This survey covers firms engaged in the production of wheat and rye flour.

Sampling Description—The data shown in this publication were collected on Bureau of the Census monthly Form M20A, Flour Milling Products. The aggregates published in this report have been compiled from a sample of approximately 250 respondents, accounting for 98 percent of the total U.S. production of flour mill products. The universe for this sample was the 1958 Census of Manufactures. The reporting panel consists of mills with a daily capacity of over 400 sacks of flour. Approximately 200 small establishments are in the nonmail universe. Their production data are estimated based upon their 1958 Census of Manufactures report. The monthly reporting panel was selected by arraying the reporting units in descending order by size for each product line, then choosing a sufficient number of respondents (beginning with the largest) to yield a coverage of approximately 98 percent for each product line.

Data prior to December 1977, shown in this publication, are not comparable to the current data due to an extensive review and updating of the mailing panel. The revisions will be shown in the Summary for 1977 to be issued later this year.

Survey Error—The figures for the current month include estimates for respondents in the reporting panel whose reports were not received in time for tabulation, as well as for 200 small respondents excluded from the mail panel. Missing figures for companies in the reporting panel are "imputed" from the month-to-month movements shown by reporting firms. The overall imputation rate is generally limited to 12 percent, including about 2 percent for small respondents excluded from the monthly reporting panel. Individual items with imputation rates greater than 12 percent are footnoted.

The imputation rate is not an explicit indicator of the potential error in published figures due to nonresponse, both because the actual monthly movements for nonrespondents may or may not closely agree with the imputed movements, and because the estimates for nonpanel cases may or may not reflect their current activity. The probable difference between the actual and imputed figures is unknown. The degree of uncertainty regarding the accuracy of the data, however, increases as the percentage of imputation increases. Figures with imputation rates above 12 percent, particularly, should be used with caution.

Revision to Previous Period Data—Statistics for previous months may be revised due to receipt of corrected data from respondents, including late reports for which imputations were previously made as described above, and other corrections. Figures which have been revised by more than 5 percent from previously published figures are indicated by footnotes.

Reporting Period Adjustment—Since January 1975, the data have been adjusted for the number of working days in the reporting period in order to compensate for differences in

individual company reporting patterns, i.e., calendar month, 4-week, 5-week periods.

Seasonal Adjustment—This report presents seasonally adjusted data in table 1A for selected series shown in table 1B. The data were seasonally adjusted using the X-11 variant of the Bureau of the Census Method II seasonal adjustment program. This seasonal adjustment program is a ratio-to-moving average method. The seasonal adjustment program largely eliminates the effect of seasonal variations (intra-year variations repeated constantly from year to year) within the series. The seasonally adjusted data usually provide a better measure than the not seasonally adjusted (original) data of the month-to-month variations which are due to factors other than seasonal pattern.

EXPLANATION OF TERMS

Units of Quantity—Grain ground is measured in bushels of 60 pounds for wheat, and 56 pounds for rye. Flour production is measured in sacks of 100 pounds.

Capacity—Based on replies to the question, "What is the maximum quantity of flour that can be produced in your mill in one day if operated for 24 hours?", the capacity of idle mills is included until the mills are reported to be destroyed, dismantled, or abandoned.

Grain—Represents the purchased weight of grain ground, including the weight of foreign material (dockage).

Millfeed—Includes bran, middlings, shorts, and other milling by products intended principally for use as feed materials.

Wheat Flour—Includes whole wheat flour, farina, industrial flour, and durum flour.

Stocks of Flour (quarterly)—Represents mill stocks in all positions, sold and unsold.

COMPARISON OF EXPORT, IMPORT, AND DOMESTIC OUTPUT DATA

Generally, it is somewhat easier to find a reasonable statistical basis for a comparison of exports with domestic output than for a comparison of imports with domestic output. Aside from the differences in the basic commodity classifications used, there are a substantial number of imported commodities which are not produced in the United States or are produced in very small quantities. On the other hand, the merchandise exported from the United States is ordinarily produced in this country and reflects items important in output.

There are other problems affecting the comparability of the three sets of data. Differences in methods of valuation is perhaps the principal such problem. There may be elements of duplication in output data but not in imports or exports; low-value transactions are excluded from data for individual export and import commodity classifications; and a small

portion of manufacturing output is not allocated to detailed commodity lines. All of these factors affect comparability to some degree. For these reasons the relationships shown in this report should be considered as only approximations.

(a) *Valuation*—Domestic producers' shipments, or production, are usually valued at the point of production—the factory, mine, or farm.

On the other hand, exports are by definition values at the point of exportation—seaport, border point, or airport. Export values are the selling price, or cost if not sold, and include expenditures for freight, insurance, and other charges to the export point.

Further, the exporters' trade margin above costs increases the export values compared with producers' values. Information on the magnitude of this incremental margin on a commodity-by-commodity basis is not available.

The dollar value shown for imports in the basic statistics is defined ordinarily as the market value in the foreign country and excludes U.S. import duties, transportation, insurance, and other costs. In actual practice only the values reported for imports subject to an ad valorem rate of duty (accounting for 10 to 15 percent of total imports) tend to conform to this definition. For other imports, the reported values may inadvertently include ocean freight; intracompany shipments may reflect arbitrary values; etc.

Thus, import values tend to understate the unit prices at which imported goods are sold in the U.S. market, in that they do not cover transportation, insurance costs, import duties, and other costs. By the same token, the total value of imports relative to domestic output tends to be understated if viewed at the point of entry into the U.S. market. The calculated value of import duties is shown separately for each commodity line in the table, but sufficient information is not available on the transportation, insurance, and other costs for individual commodities for those costs to be shown in this report.

(b) *Duplication in Quantity and Value of Output*—Because producers' shipments of some commodities may be used as materials for incorporation into other commodities, combinations of data for such commodities may contain a certain amount of duplication. Thus, percentages of exports to output or imports to apparent consumption (output plus imports minus exports) at 4-digit or broader levels may be understated.

Where the duplication is known to be substantial, the output data are appropriately noted in the table.

(c) *Low-Value Export and Import Transactions*—Commodity information is not shown for individual imports valued under \$251. For exports, commodity information is not reported for shipments individually valued under \$251 effective October 1969 and for shipments value under \$100 prior to October 1969. This is believed to have only negligible effect on the statistics for the bulk of the commodities.

(d) *Manufacturers' Shipments, Not Specified by Kind*—The value of manufacturers' shipments at the 4-digit commodity level often includes a small amount which is not distributed among the individual 5-digit product classes. Export and import percentages at the more detailed levels might thus be slightly overstated.

(e) *Time Lag Between Output and Exports*—There will sometimes be a lag between the time a commodity is produced or shipped by the producer and the time it is actually exported. The time lag will usually be greater if the merchandise moves through intermediaries (wholesalers, exporters) rather than directly from producers into the export market. Ordinarily, this type of discrepancy would not be very important in annual figures.

(f) *"Direct" vs "Total" Commodity Exports*—The commodity export data in this report represent direct exports of those commodities. They do not include the exports of the commodities which are incorporated into other, more finished products and exported in finished form. Thus, by showing only direct exports, the relation of exports to output for intermediate products, such as steel shapes and forms, is considerably understated. The figures for steel exported as such, does not include steel incorporated in automobiles, tractors, etc., which are also exported.

(g) *Used Commodities*—With a few exceptions, used or rebuilt commodities are classified in the same import or export codes as is new merchandise. Percentages are thus overstated to the extent that used or rebuilt products are significant in trade.

RELATED REPORTS

An annual Current Industrial Report is published in this series. The annual report summarizes monthly figures and incorporates all known revisions in the series for both current and previous year, thus, providing a single reference copy to replace the monthly publications. This annual summary provides additional information on the history of this survey.

The Bureau of the Census also publishes reports on related products as follows:

Series	Frequency	Title
<i>Current Industrial Reports</i>		
M3-1	Monthly	Manufacturers' Shipments, Inventories, and Orders
M20C	Monthly	Confectionery, Including Chocolate Products
<i>Foreign Trade Reports</i>		
FT-410	Monthly	U.S. Exports—Schedule B—Commodity by Country
FT-135	Monthly	U.S. General Imports—Schedule A—Commodity by Country

CONTACT FOR DATA USERS

Subject Area	Contact	Phone Number
Current Industrial Report M20A	Geraldine Bynum	(301) 763-7807
Foreign Trade publications	Juanita Noone	(301) 763-5140
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Flour Milling Products



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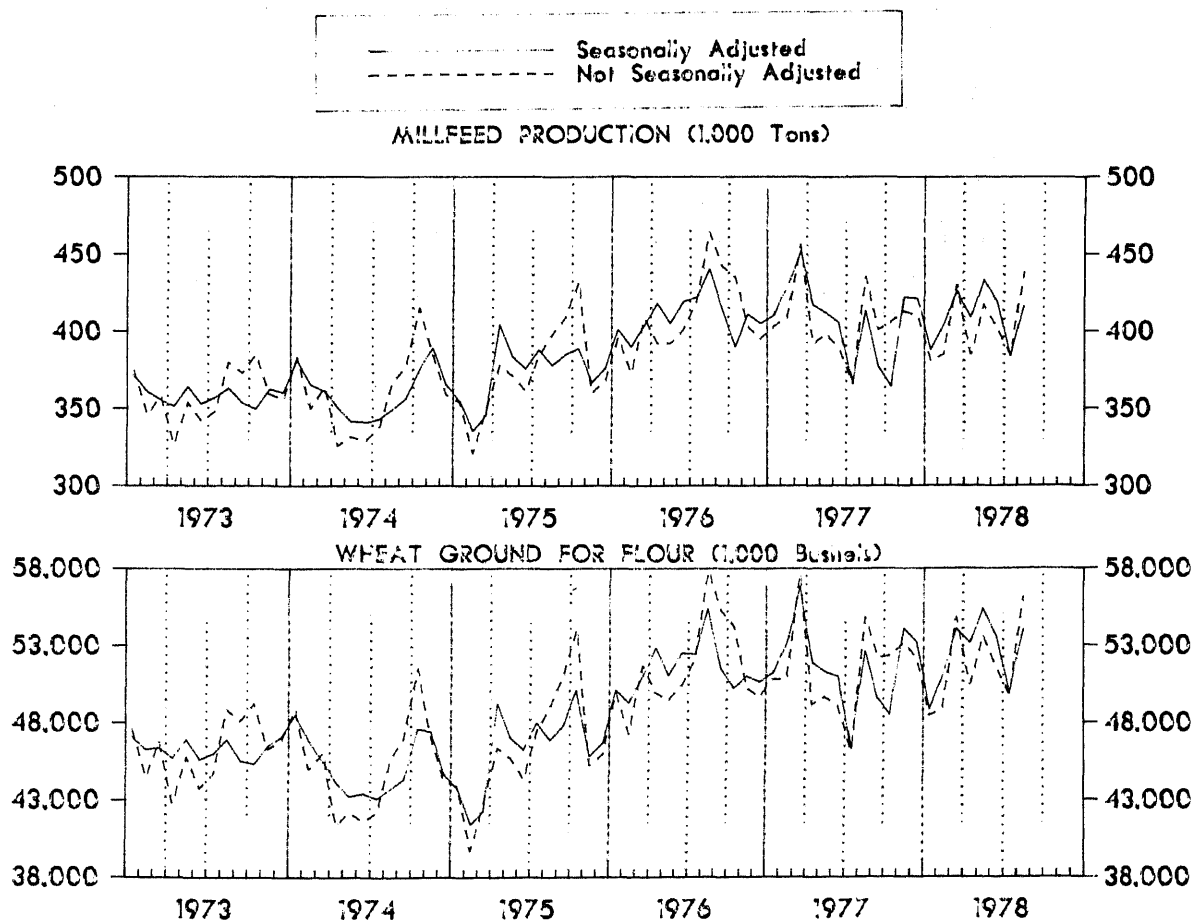
M20A(78)-8
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The statistics in this publication are based on a survey of manufacturers and represent total U.S. production of flour milling products. Estimates are included for companies whose reports were not received in time for tabulation. A more

complete description of this survey appears on page 6. An annual Current Industrial Report is published in this series. The annual report includes all the months for the current and previous years and incorporates all known revisions in the series.

THIS REPORT INCLUDES DATA COMPARING DOMESTIC OUTPUT, EXPORTS, AND IMPORTS

WHEAT FLOUR MILLING: 1973 TO 1978



Address inquiries concerning these figures to U.S. Department of Commerce, Bureau of the Census, Industry Division, Washington, D.C. 20233, or call Geraldine Bynum, (301) 763-7807.

For sale by the Subscriber Services Section (Publications), Bureau of the Census, Washington, D.C. 20233, or any U.S. Department of Commerce district office. Postage stamps not acceptable; currency submitted at sender's risk. Remittances from foreign countries must be by international money order or by a draft on a U.S. bank. Price 25 cents per copy, \$3.30 per year.

Table 1A. SUMMARY OF WHEAT FLOUR MILLING: 1976 TO 1978

(Seasonally adjusted)

Month and year	Wheat flour production average per working day ¹ (1,000 cwt.)	Millfeed production (1,000 tons)	Wheat ground for flour (1,000 bushels)
1978			
August.....	1,071	416	53,899
July.....	1,100	384	49,849
June.....	1,096	419	53,580
May.....	1,146	433	55,373
April.....	1,173	409	53,191
March.....	1,077	426	54,064
February.....	1,076	404	51,054
January.....	1,003	388	48,870
1977			
December.....	1,086	421	53,169
November.....	1,101	422	54,078
October.....	1,043	364	48,519
September.....	1,060	377	48,599
August.....	1,045	413	52,633
July.....	1,064	366	46,334
June.....	1,036	405	51,010
May.....	1,063	412	51,331
April.....	1,087	417	51,882
March.....	1,144	452	56,839
February.....	1,121	429	53,069
January.....	1,089	410	51,210
1976			
December.....	977	405	50,653
November.....	1,033	411	51,039
October.....	1,075	390	50,255
September.....	1,055	415	51,532
August.....	1,154	440	55,388
July.....	1,086	422	52,460
June.....	1,058	419	52,531
May.....	1,123	405	51,071
April.....	1,065	418	52,853
March.....	1,023	404	51,031
February.....	1,038	390	49,318
January.....	1,073	401	50,126

¹The number of working days per month is computed on the basis of a 5-day week with allowances for the following holidays: January 1, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, and December 25.

Table 1B. SUMMARY OF WHEAT FLOUR MILLING: 1976 TO 1978

(Not seasonally adjusted)

Month and year	Wheat flour production (1,000 cwt.)		Millfeed production (tons)	Wheat ground for flour (1,000 bushels)	Wheat flour mill stocks ² (1,000 cwt.)	Daily 24-hour capacity in wheat flour ² (1,000 cwt.)	Wheat flour produced as percent of capacity	Flour extraction rate ³ (percent)
	Average per working day ¹	Calendar month total						
1978								
August.....	1,089	25,052	437,676	56,109	(NA)	1,036	102.5	74.4
July.....	1,063	22,335	384,090	49,749	(NA)	1,036	100.1	74.8
June.....	1,047	23,051	401,878	51,544	3,459	1,036	101.1	74.5
May.....	1,094	24,078	417,032	53,601	(NA)	1,034	105.8	74.5
April.....	1,127	22,554	385,227	50,478	(NA)	1,034	109.1	74.5
March.....	1,057	24,330	430,260	54,821	4,096	1,034	102.3	73.8
February.....	1,089	21,738	385,269	48,910	(NA)	1,072	101.4	74.2
January.....	990	21,787	380,717	48,430	(NA)	1,072	92.4	74.9
1977								
December.....	1,062	23,363	410,169	52,106	4,160	1,072	99.1	74.7
November.....	1,133	23,785	412,818	53,159	(NA)	1,104	102.6	74.6
October.....	1,114	23,396	406,255	52,352	(NA)	1,104	100.9	74.5
September.....	1,113	23,381	401,384	52,244	3,782	1,104	100.8	74.6
August.....	1,062	24,419	435,359	54,844	(NA)	1,098	96.7	74.2
July.....	1,028	20,566	365,665	46,149	(NA)	1,098	93.7	74.3
June.....	990	21,769	388,922	49,072	4,456	1,098	90.1	73.9
May.....	1,053	22,121	398,051	49,688	(NA)	1,114	94.6	74.2
April.....	1,042	21,877	392,101	49,184	(NA)	1,114	93.5	74.1
March.....	1,121	25,787	456,406	57,635	4,542	1,114	100.6	74.6
February.....	1,136	22,716	408,870	50,840	(NA)	1,041	109.1	74.5
January.....	1,076	22,604	403,353	50,852	(NA)	1,041	103.4	74.1
1976								
December.....	959	22,058	395,380	49,691	4,633	1,041	92.1	74.0
November.....	1,062	22,297	402,738	50,273	(NA)	1,031	103.0	73.9
October.....	1,147	24,090	434,862	54,225	(NA)	1,031	111.3	74.0
September.....	1,117	24,572	442,353	55,294	3,870	1,031	108.3	74.1
August.....	1,169	25,715	463,992	57,825	(NA)	1,049	111.4	74.1
July.....	1,048	23,063	419,395	52,145	(NA)	1,049	99.9	73.7
June.....	1,015	22,328	401,357	50,430	4,191	1,049	96.8	73.8
May.....	1,106	22,127	391,547	49,488	(NA)	1,048	105.6	74.5
April.....	1,017	22,381	392,245	49,946	(NA)	1,048	97.1	74.7
March.....	1,003	23,076	407,721	51,695	4,818	1,048	95.7	74.4
February.....	1,054	21,078	372,617	47,296	(NA)	1,042	101.1	74.3
January.....	1,062	22,292	396,105	49,976	(NA)	1,042	101.9	74.3

Note: Data include estimate for small mills.

(NA) Not available.

¹The number of working days per month is computed on the basis of a 5-day week with allowances for the following holidays: January 1, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, and December 25.²Collected quarterly.³Wheat flour production as compared with amount of wheat ground.

Table 2. QUANTITY OF DURUM WHEAT AND RYE FLOUR PRODUCTION, GRAIN CONSUMPTION MILL STOCKS, AND CAPACITY

Product code	Description of item	Unit of measure	August 1978	July 1978	August 1977
00111 73	Durum wheat (included in table 1 data):				
20411 53	Durum wheat ground.....	M bu.....	3,352	2,225	3,347
20411 55	Straight semolina durum flour.....	M cwt.....	1,483	961	1,442
	Blended semolina durum flour.....	..do.....	(D)	(D)	(D)
00119 51	Rye:				
20416 11	Rye ground for flour.....	M bu.....	282	260	328
20416 18	Rye flour production.....	M cwt.....	123	114	151
20416 18	Rye millfeed production.....	Tons.....	1,450	1,308	1,688
20416 11	Rye flour stocks ¹	M cwt.....	(NA)	(NA)	(NA)
	24 hour capacity ¹.....	..do.....	9	9	(NA)

Note: Data include estimates for small mills. Detail may not add to total due to independent rounding. These data exclude all flour blended by macaroni and spaghetti manufacturers, etc., as such activities are not within scope of this survey. Only mills engaged in milling flour or meal are included in this survey.

(D) Withheld to avoid disclosure of figures for individual companies. (NA) Not available.

¹Collected quarterly.

Table 3. QUANTITY OF WHEAT GROUND FOR FLOUR AND WHEAT FLOUR PRODUCTION, BY DIVISION AND STATES

(Wheat ground for flour in thousands of bushels; wheat production in thousands of hundredweight)

Geographic area	August 1978		July 1978	
	Wheat ground for flour	Wheat flour production	Wheat ground for flour	Wheat flour production
United States, total.....	56,109	25,052	49,749	22,335
Middle Atlantic.....	7,849	3,388	6,830	3,114
New York.....	6,235	2,697	5,585	2,593
North Central.....	30,389	13,551	26,700	12,019
Ohio.....	2,958	1,280	2,521	1,120
Indiana.....	1,273	546	1,222	525
Illinois.....	3,490	1,542	2,848	1,253
Michigan.....	937	403	777	324
Minnesota.....	6,195	2,816	5,326	2,434
Iowa.....	(D)	(D)	(D)	(D)
Missouri.....	5,183	2,309	4,817	2,152
Nebraska.....	(D)	(D)	(D)	(D)
Kansas.....	6,611	2,980	6,090	2,728
South Atlantic.....	3,567	1,533	3,104	1,336
East South Central.....	2,651	1,159	2,457	1,063
Tennessee.....	1,981	875	1,881	815
West South Central.....	3,601	1,614	3,494	1,567
Oklahoma.....	1,514	698	1,423	651
Texas.....	1,430	627	1,475	655
Mountain.....	3,040	1,370	2,720	1,212
Montana.....	774	361	561	258
Utah.....	(D)	(D)	(D)	(D)
Pacific.....	5,012	2,437	4,444	2,024
Washington.....	1,618	718	1,298	571
Oregon.....	861	413	863	402
California and Hawaii.....	2,527	1,306	2,283	1,051

Note: Detail may not add to total due to independent rounding.

(D) Withheld to avoid disclosing figures for individual companies.

Table 4. EXPORTS OF WHEAT AND WHEAT FLOUR

Country to which exported	July 1978	June 1978	7 months through July 1978
WHEAT FLOUR, EXCEPT MEAL AND GROATS, DONATED FOR RELIEF OR CHARITY (1314010 AND 1314030) (1,000 cwt.)			
Total.....	239	123	1,333
Egypt.....	-	-	238
Guatemala.....	-	-	6
Colombia.....	-	1	17
Ecuador.....	-	-	2
Brazil.....	-	-	1
Israel.....	-	-	88
India.....	-	-	55
Chile.....	-	-	64
Sri Lanka (Ceylon).....	15	4	63
Philippine Republic.....	76	36	278
Morocco.....	148	43	290
Other.....	-	39	231
WHEAT FLOUR, WHOLLY U.S. WHEAT, EXCEPT DURUM FLOUR AND SEMOLINA (1314040) (1,000 cwt.)			
Total.....	1,547	2,442	11,910
Nicaragua.....	-	2	8
Jamaica.....	15	53	367
Brazil.....	-	-	-
Iceland.....	-	-	12
Jordan.....	114	-	114
Saudi Arabia.....	116	541	1,989
Sri Lanka (Ceylon).....	202	314	2,224
Egypt.....	1,015	7,347	5,467
Philippine Republic.....	-	-	-
Korean Republic.....	-	-	-
Morocco.....	-	-	-
Other.....	199	185	1,843
WHEAT, INCLUDING SPELT OR MESLIN, UNMILLED, NOT DONATED FOR RELIEF OR CHARITY (1306540) (1,000 bu.)			
Total.....	106,108	108,803	698,023
U.S.S.R.....	7,790	5,103	80,921
Venezuela.....	2,152	3,694	15,204
Peru.....	1,031	1,901	8,531
Brazil.....	9,981	14,270	82,145
Portugal.....	-	411	12,454
Iran.....	2,315	6,582	29,792
Indonesia.....	2,657	3,542	9,387
Korean Republic.....	379	4,000	31,602
China (Taiwan).....	2,841	236	12,982
Japan.....	7,329	9,880	67,389
Egypt.....	7,810	5,075	34,985
Nigeria.....	3,824	2,381	18,351
Other.....	48,109	51,755	284,339

Note: Data in this table are taken from Foreign Trade publication FT-410, U.S. Exports. The Schedule B codes are shown above.

- Represents zero.

Table 5. PRODUCTION, EXPORTS, IMPORTS AND APPARENT CONSUMPTION OF WHEAT PRODUCTION: JULY 1978

(Quantity in 1,000 cwt.; value in thousands of dollars)

Product	Manufacturers' shipments		Export of domestic merchandise ¹		Percent exports to manufacturers' shipments		Imports for consumption ²		Calculated import duty	Apparent consumption ⁴	
	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value ³		Quantity	Value
Wheat flour.....	22,335	(NA)	1,786	14,784	8.0	(NA)	-	-	-	20,549	(NA)

Note: Comparison of Standard Industrial Classification codes Schedule B Export numbers, and TSUSA import numbers is as follows:

Domestic output	Exports	Imports
20411	131.4010-131.4040	-

- Represents zero. (NA) Not available.

¹Source: Bureau of Census Report FT-410, U.S. Exports, Commodity by Country.

²Source: Bureau of the Census Report IM-146, Imports for Consumption.

³This dollar value represents the c.i.f. (cost, insurance, and freight) value at first port of entry in the United States plus U.S. import duties.

⁴Apparent consumption represents domestic production plus imports minus exports.

DESCRIPTION OF SURVEY

Scope of Survey—This survey covers firms engaged in the production of wheat and rye flour.

Sampling Description—The data shown in this publication were collected on Bureau of the Census monthly Form M20A, Flour Milling Products. The aggregates published in this report have been compiled from a sample of approximately 250 respondents, accounting for 98 percent of the total U.S. production of flour mill products. The universe for this sample was the 1958 Census of Manufactures. The reporting panel consists of mills with a daily capacity of over 400 sacks of flour. Approximately 200 small establishments are in the nonmail universe. Their production data are estimated based upon their 1958 Census of Manufactures report. The monthly reporting panel was selected by arraying the reporting units in descending order by size for each product line, then choosing a sufficient number of respondents (beginning with the largest) to yield a coverage of approximately 98 percent for each product line.

The data for 1977 and 1976 as shown in tables 1A and 1B of this report have been revised. Approximately six establishments were added to this survey in January 1978 based upon an extensive reconciliation with the 1976 Annual Survey of Manufactures (ASM). Data for 1976 and 1977 have been estimated for these plants based upon their 1976 ASM data and their 1978 M20A reports. Revised State data for 1976 and 1977 will be shown in a separate report to be issued in the next few weeks.

Survey Error—The figures for the current month include estimates for respondents in the reporting panel whose reports were not received in time for tabulation, as well as for 200 small respondents excluded from the mail panel. Missing figures for companies in the reporting panel are "imputed" from the month-to-month movements shown by reporting firms. The overall imputation rate is generally limited to 12 percent, including about 2 percent for small respondents excluded from the monthly reporting panel. Individual items with imputation rates greater than 12 percent are footnoted.

The imputation rate is not an explicit indicator of the potential error in published figures due to nonresponse, both because the actual monthly movements for nonrespondents may or may not closely agree with the imputed movements and because the estimates for nonpanel cases may or may not reflect their current activity. The probable difference between the actual and imputed figures is unknown. The degree of uncertainty regarding the accuracy of the data, however, increases as the percentage of imputation increases. Figures with imputation rates above 12 percent, particularly, should be used with caution.

Revision to Previous Period Data—Statistics for previous months may be revised due to receipt of corrected data from respondents, including late reports for which imputations were previously made as described above, and other corrections. Figures which have been revised by more than 5 percent from previously published figures are indicated by footnotes.

Reporting Period Adjustment—Since January 1975, the data have been adjusted for the number of working days in the reporting period in order to compensate for differences in individual company reporting patterns, i.e., calendar month, 4-week, 5-week periods.

Seasonal Adjustment—This report presents seasonally adjusted data in table 1A for selected series shown in table 1B. The data were seasonally adjusted using the X-11 variant of the Bureau of the Census Method II seasonal adjustment program. This seasonal adjustment program is a ratio-to-moving average method. The seasonal adjustment program largely eliminates the effect of seasonal variations (intra-year variations repeated constantly from year to year) within the series. The seasonally adjusted data usually provide a better measure than the not seasonally adjusted (original) data of the month-to-month variations which are due to factors other than seasonal pattern.

EXPLANATION OF TERMS

Units of Quantity—Grain ground is measured in bushels of 60 pounds for wheat, and 56 pounds for rye. Flour production is measured in sacks of 100 pounds.

Capacity—Based on replies to the question, "What is the maximum quantity of flour that can be produced in your mill in one day if operated for 24 hours?", the capacity of idle mills is included until the mills are reported to be destroyed, dismantled, or abandoned.

Grain—Represents the purchased weight of grain ground, including the weight of foreign material (dockage).

Millfeed—Includes bran, middlings, shorts, and other milling by products intended principally for use as feed materials.

Wheat Flour—Includes whole wheat flour, farina, industrial flour, and durum flour.

Stocks of Flour (quarterly)—Represents mill stocks in all positions, sold and unsold.

COMPARISON OF EXPORT, IMPORT, AND DOMESTIC OUTPUT DATA

The Standard Industrial Classification (SIC) system used for domestic output and the statistical export and import commodity classifications were developed independently and are based on somewhat differing systems of classification. This results in considerable difficulty in comparing the three types of data for many commodity areas. The domestic output classification is based on type of industry; whereas, the export and import classification system is more materials oriented. Aside from the differences in the basic commodity classifications, there are additional problems involving import data, since there are a substantial number of imported commodities, which are not produced in the United States or which are produced only in very small quantities and which, therefore, have no com-

parable domestic output classification. The relationships shown in this report should be considered only as approximations, since, in addition to those mentioned above, there are also the following problems affecting the comparability of the three sets of data:

(a) *Valuation*—There are different methods of valuation for the three types of data.

Domestic Output—Valued at the point of production. It includes the net sales price, f.o.b. plant, after discounts and allowances, exclusive of freight charges and excise taxes.

Exports—Valued at the point of exportation. It includes the selling price, or cost if not sold, and inland freight, insurance, and other charges to the export point.

Imports—Valued at the first port of entry in the United States. It includes c. i. f. (cost, insurance, and freight), duty, and other charges to the import point.

(b) *Duplication in Quantity and Value of Output*—Because producers' shipments of some commodities may be used as materials for incorporation into other commodities, combinations of data for such commodities may contain a certain amount of duplication. Thus, percentages of exports to output or imports to apparent consumption (output plus imports minus exports) at four-digit or broader levels may be understated. Where duplication is known to be substantial, the output data are appropriately noted in the table.

(c) *Low-Valued Export and Import Transactions*—Commodity information is not shown for individual imports valued under \$251. For exports, commodity information is not reported for shipments individually valued under \$251 effective October 1969 and for shipments valued under \$100 prior to October 1969. This is believed to have only negligible effect on the statistics for most commodities.

(d) *Manufacturers' Shipments, Not Specified by Kind*—The value of manufacturers' shipments at the four-digit industry level often includes a small amount which is not distributed among the individual five-digit product classes. Export and import percentages at the more detailed levels might, therefore, be slightly overstated.

(e) *Time Lag Between Output and Exports*—There will be a lag between the time a commodity is produced or shipped by the producer and the time it is actually exported, especially when intermediaries (wholesalers, exporters, etc.) are involved. Ordinarily, this type of discrepancy is insignificant in annual figures.

(f) *"Direct" vs "Total" Commodity Export and Imports*—Export and import data do not include materials which are

incorporated into other more finished products and exported or imported in finished form. Thus, by showing only direct exports and imports, the relation of exports to output and imports to apparent consumption for intermediate products is considerably understated.

(g) *Used Commodities*—With a few exceptions, used or rebuilt commodities are classified in the same import or export codes as is new merchandise. Percentages are thus overstated to the extent that used or rebuilt products are significant in trade.

RELATED REPORTS

An annual Current Industrial Report is published in this series. The annual report summarizes monthly figures and incorporates all known revisions in the series for both current and previous year, thus, providing a single reference copy to replace the monthly publications. This annual summary provides additional information on the history of this survey.

The Bureau of the Census also publishes reports on related products as follows:

Series	Frequency	Title
<i>Current Industrial Reports</i>		
M3-1	Monthly	Manufacturers' Shipments, Inventories, and Orders
M20C	Monthly	Confectionery, Including Chocolate Products
<i>Foreign Trade Reports</i>		
FT-410	Monthly	U.S. Exports—Schedule B—Commodity by Country
FT-135	Monthly	U.S. General Imports—Schedule A—Commodity by Country

CONTACTS FOR DATA USERS

Subject Area	Contact	Phone Number
Current Industrial Report M20A	Geraldine Bynum	(301) 763-7807
Foreign Trade publications	Juanita Noone	(301) 763-5140
To order a Census Bureau publication	Daisy Wilkams	(301) 763-7472
To order Census Bureau microfiche	Dorothy Dunham	(301) 763-5511

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SEPTEMBER 1978

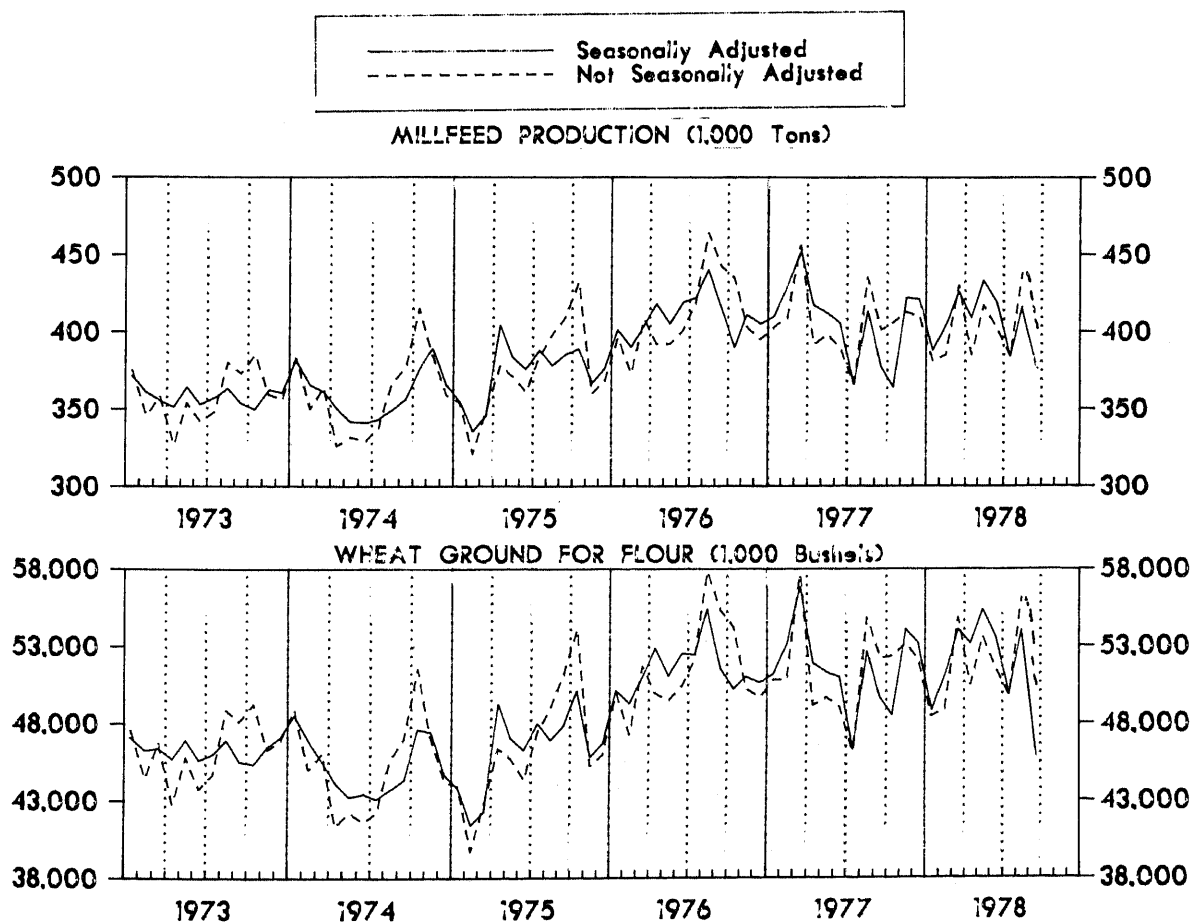
M20A(78)-9
Issued December 1978

The statistics in this publication are based on a survey of manufacturers and represent total U.S. production of flour milling products. Estimates are included for companies whose reports were not received in time for tabulation. A more

complete description of this survey appears on page 6. An annual Current Industrial Report is published in this series. The annual report includes all the months for the current and previous years and incorporates all known revisions in the series.

THIS REPORT INCLUDES DATA COMPARING DOMESTIC OUTPUT, EXPORTS, AND IMPORTS

WHEAT FLOUR MILLING: 1973 TO 1978



Address inquiries concerning these figures to U.S. Department of Commerce, Bureau of the Census, Industry Division, Washington, D.C. 20233, or call Geraldine Bynum, (301) 763-7807.

For sale by the Subscriber Services Section (Publications), Bureau of the Census, Washington, D.C. 20233, or any U.S. Department of Commerce district office. Postage stamps not acceptable; currency submitted at sender's risk. Remittances from foreign countries must be by international money order or by a draft on a U.S. bank. Price 25 cents per copy, \$3.30 per year.

Table 1A. SUMMARY OF WHEAT FLOUR MILLING: 1976 TO 1978

(Seasonally adjusted)

Month and year	Wheat flour production average per working day ¹ (1,000 cwt.)	Millfeed production (1,000 tons)	Wheat ground for flour (1,000 bushels)
1978			
September.....	1,069	375	46,939
August.....	1,071	417	53,854
July.....	1,100	384	49,849
June.....	1,096	419	53,580
May.....	1,146	433	55,373
April.....	1,173	409	53,191
March.....	1,077	426	54,064
February.....	1,076	404	51,054
January.....	1,003	388	48,870
1977			
December.....	1,086	421	53,169
November.....	1,101	422	54,078
October.....	1,043	364	48,519
September.....	1,060	377	48,599
August.....	1,045	413	52,633
July.....	1,064	366	46,334
June.....	1,036	405	51,010
May.....	1,063	412	51,331
April.....	1,087	417	51,882
March.....	1,144	452	56,839
February.....	1,121	429	53,069
January.....	1,089	410	51,210
1976			
December.....	977	405	50,653
November.....	1,033	411	51,039
October.....	1,075	390	50,255
September.....	1,055	415	51,532
August.....	1,154	440	55,388
July.....	1,086	422	52,460
June.....	1,058	419	52,531
May.....	1,123	405	51,071
April.....	1,065	418	52,853
March.....	1,023	404	51,031
February.....	1,038	390	49,318
January.....	1,073	401	50,126

¹The number of working days per month is computed on the basis of a 5-day week with allowances for the following holidays: January 1, Memorial Day, Independence Day, Thanksgiving Day, and December 25.

Table 1B. SUMMARY OF WHEAT FLOUR MILLING: 1976 TO 1978

(Not seasonally adjusted)

Month and year	Wheat flour production (1,000 cwt.)		Millfeed production (tons)	Wheat ground for flour (1,000 bushels)	Wheat flour mill stocks ² (1,000 cwt.)	Daily 24-hour capacity in wheat flour ² (1,000 cwt.)	Wheat flour produced as percent of capacity	Flour extraction rate ³ (percent)
	Average per working day ¹	Calendar month total						
1978								
September.....	1,119	22,395	400,263	50,506	3,342	1,057	105.9	73.9
August.....	1,089	25,053	438,773	56,062	(NA)	1,036	105.1	74.4
July.....	1,063	22,335	384,090	49,749	(NA)	1,036	100.1	74.8
June.....	1,047	23,051	401,878	51,544	3,459	1,036	101.1	74.5
May.....	1,094	24,078	417,032	53,601	(NA)	1,034	105.8	74.5
April.....	1,127	22,554	385,227	50,478	(NA)	1,034	109.1	74.5
March.....	1,057	24,330	430,260	54,821	4,096	1,034	102.3	73.8
February.....	1,089	21,738	385,269	48,910	(NA)	1,072	101.4	74.2
January.....	1,990	21,787	380,717	48,430	(NA)	1,072	92.4	74.9
1977								
December.....	1,062	23,363	410,169	52,106	4,160	1,072	99.1	74.7
November.....	1,133	23,785	412,818	53,159	(NA)	1,104	102.6	74.6
October.....	1,114	23,396	406,255	52,352	(NA)	1,104	100.9	74.5
September.....	1,113	23,381	401,384	52,244	3,782	1,104	100.8	74.6
August.....	1,062	24,419	435,359	54,844	(NA)	1,098	96.7	74.2
July.....	1,028	20,566	365,665	46,149	(NA)	1,098	93.7	74.3
June.....	990	21,769	388,922	49,072	4,456	1,098	90.1	73.9
May.....	1,053	22,121	398,051	49,688	(NA)	1,114	94.6	74.2
April.....	1,042	21,877	392,101	49,184	(NA)	1,114	93.5	74.1
March.....	1,121	25,787	456,406	57,635	4,542	1,114	100.6	74.6
February.....	1,136	22,716	408,870	50,840	(NA)	1,041	109.1	74.5
January.....	1,076	22,604	403,353	50,852	(NA)	1,041	103.4	74.1
1976								
December.....	959	22,058	395,380	49,691	4,633	1,041	92.1	74.0
November.....	1,062	22,297	402,738	50,273	(NA)	1,031	103.0	73.9
October.....	1,147	24,090	434,862	54,225	(NA)	1,031	111.3	74.0
September.....	1,117	24,572	442,353	55,294	3,870	1,031	108.3	74.1
August.....	1,169	25,715	463,992	57,825	(NA)	1,049	111.4	74.1
July.....	1,048	23,063	419,395	52,145	(NA)	1,049	99.9	73.7
June.....	1,015	22,328	401,357	50,430	4,191	1,049	96.8	73.8
May.....	1,106	22,127	391,547	49,488	(NA)	1,048	105.6	74.5
April.....	1,017	22,381	392,245	49,946	(NA)	1,048	97.1	74.7
March.....	1,003	23,076	407,721	51,695	4,818	1,048	95.7	74.4
February.....	1,054	21,078	372,617	47,296	(NA)	1,042	101.1	74.3
January.....	1,062	22,292	396,105	49,976	(NA)	1,042	101.9	74.3

Note: Data include estimate for small mills. The data shown for 1976 and 1977 exclude a number of plants that began operations during this period. These companies account for approximately 5 to 8 percent of our 1977 estimates. Revised monthly data will be shown in the annual summary to be released in early 1978. Data for January 1978 will include the production for these companies.

(NA) Not available.

¹The number of working days per month is computed on the basis of a 5-day week with allowances for the following holidays: January 1, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, and December 25. ²Collected quarterly. ³Wheat flour production as compared with amount of wheat ground.

Table 2. QUANTITY OF DURUM WHEAT AND RYE FLOUR PRODUCTION, GRAIN CONSUMPTION MILL STOCKS, AND CAPACITY

Product code	Description of item	Unit of measure	September 1978	August 1978
	Durum wheat (included in table 1 data):			
00111 73	Durum wheat ground ¹	M bu.....	3,278	3,352
20411 53	Straight semolina durum flour ¹	M cwt.....	1,468	1,487
20411 55	Blended semolina durum flour.....	..do.....	(D)	(D)
	Rye:			
00119 51	Rye ground for flour.....	M bu.....	290	282
20416 11	Rye flour production.....	M cwt.....	129	123
20416 18	Rye millfeed production.....	Tons.....	1,739	1,450
20416 11	Rye flour stocks ²	M cwt.....	16	(NA)
	24 hour capacity ².....	..do.....	10	10

Note: Data include estimates for small mills. Detail may not add to total due to independent rounding. These data exclude all flour blended by macaroni and spaghetti manufacturers, etc., as such activities are not within scope of this survey. Only mills engaged in milling flour or meal are included in this survey.

(D) Withheld to avoid disclosure of figures for individual companies. (NA) Not available.

¹These data as published for June 1978 should be revised to read as follows: Durum wheat ground, 2,790; straight semolina durum flour, 1,224. ²Collected quarterly.

Table 3. QUANTITY OF WHEAT GROUND FOR FLOUR AND WHEAT FLOUR PRODUCTION, BY DIVISION AND STATES

(Wheat ground for flour in thousands of bushels; wheat production in thousands of hundredweight)

Geographic area	September 1978		August 1978	
	Wheat ground for flour	Wheat flour production	Wheat ground for flour	Wheat flour production
United States, total.....	50,506	22,395	56,062	25,053
Middle Atlantic.....	7,236	2,695	7,851	3,388
New York.....	5,931	2,695	6,236	2,697
North Central.....	27,102	12,092	30,344	13,542
Ohio.....	2,759	1,183	2,914	1,271
Indiana.....	1,312	565	1,273	546
Illinois.....	3,140	1,393	3,489	1,542
Michigan.....	914	397	937	403
Minnesota.....	5,584	2,543	6,195	2,816
Iowa.....	(D)	(D)	(D)	(D)
Missouri.....	4,314	1,929	5,183	2,309
Nebraska.....	(D)	(D)	(D)	932
Kansas.....	6,079	2,735	6,611	2,980
South Atlantic.....	3,139	1,148	3,567	1,533
East South Central.....	2,439	1,062	2,651	1,159
Tennessee.....	1,828	801	1,981	875
West South Central.....	3,249	1,467	3,601	1,614
Oklahoma.....	1,416	653	1,514	698
Texas.....	1,257	558	1,430	627
Mountain.....	2,925	1,322	3,040	1,370
Montana.....	737	344	774	361
Utah.....	(D)	(D)	(D)	(D)
Pacific.....	4,416	2,038	5,008	2,447
Washington.....	1,297	573	1,618	718
Oregon.....	762	348	867	425
California and Hawaii.....	2,357	1,117	2,523	1,304

Note: Detail may not add to total due to independent rounding.

(D) Withheld to avoid disclosure of figures for individual companies.

Table 4. EXPORTS OF WHEAT AND WHEAT FLOUR

Country to which exported	August 1978	July 1978	8 months through August 1978
WHEAT FLOUR, EXCEPT MEAL AND GROATS, DONATED FOR RELIEF OR CHARITY (1314010 AND 1314030) (1,000 cwt.)			
Total.....	100	239	1,433
Egypt.....	-	-	238
Guatemala.....	-	-	6
Colombia.....	-	-	17
Ecuador.....	-	-	2
Brazil.....	-	-	1
Israel.....	4	-	88
India.....	-	-	59
Chile.....	-	-	64
Sri Lanka (Ceylon).....	-	15	63
Philippine Republic.....	37	76	315
Morocco.....	59	148	349
Other.....	-	-	231
WHEAT FLOUR, WHOLLY U.S. WHEAT, EXCEPT DURUM FLOUR AND SEMOLINA (1314040) (1,000 cwt)			
Total.....	1,860	1,547	13,770
Nicaragua.....	-	-	8
Jamaica.....	14	15	381
Brazil.....	-	-	-
Iceland.....	-	-	12
Jordan.....	-	114	114
Saudi Arabia.....	309	116	2,298
Sri Lanka (Ceylon).....	353	202	2,577
Egypt.....	952	1,015	6,419
Philippine Republic.....	-	-	-
Korean Republic.....	-	-	-
Morocco.....	-	-	-
Other.....	232	199	2,075
WHEAT, INCLUDING SPELT OR MESLIN, UNMILLED, NOT DONATED FOR RELIEF OR CHARITY (1306540) (1,000 bu.)			
Total.....	131,866	108,803	829,889
U.S.S.R.....	1,615	5,103	82,538
Venezuela.....	2,596	3,694	17,800
Peru.....	3,971	1,901	12,507
Brazil.....	4,885	14,270	87,030
Portugal.....	-	411	17,545
Iran.....	5,091	6,582	33,280
Indonesia.....	3,528	3,542	14,630
Korean Republic.....	5,243	4,000	36,845
China (Taiwan).....	999	236	13,981
Japan.....	10,458	9,880	77,847
Egypt.....	1,814	5,075	36,799
Nigeria.....	2,443	2,381	20,794
Other.....	74,682	51,755	309,021

Note: Data in this table are taken from Foreign Trade publication FT-410, U.S. Exports. The Schedule B codes are shown above.

- Represents zero.

Table 5. PRODUCTION, EXPORTS, IMPORTS AND APPARENT CONSUMPTION OF WHEAT PRODUCTION: AUGUST 1978

(Quantity in 1,000 cwt.; value in thousands of dollars)

Product	Manufacturers' shipments		Export of domestic merchandise ¹		Percent exports to manufacturers' shipments		Imports for consumption ²		Calculated import duty	Apparent consumption ⁴	
	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value ³		Quantity	Value
Wheat flour.....	25,052	(NA)	1,960	121,007	7.0	(NA)	-	-	-	23,092	(NA)

Note: Comparison of Standard Industrial Classification codes Schedule B Export numbers, and TSUSA import numbers is as follows:

Domestic output	Exports	Imports
20411	131.4010-131.4040	-

- Represents zero. (NA) Not available.

¹Source: Bureau of the Census Report FT-410, U.S. Exports, Commodity by Country.

²Source: Bureau of the Census Report IM-146, Imports for Consumption.

³This dollar value represents the c.i.f. (cost, insurance, and freight) value at first port of entry in the United States plus U.S. import duties.

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Wheat Flour—Includes whole wheat flour, farina, industrial flour, and durum flour.

Stocks of Flour (quarterly)—Represents mill stocks in all position, sold and unsold.

COMPARISON OF EXPORT, IMPORT, AND DOMESTIC OUTPUT DATA

The Standard Industrial Classification (SIC) system used for domestic output and the statistical export and import commodity classifications were developed independently and are based on somewhat differing systems of classification. This results in considerable difficulty in comparing the three types of data for many commodity areas. The domestic output classification is based on type of industry; whereas, the export and import classification system is more materials oriented. Aside from the differences in the basic commodity classifications, there are additional problems involving import data, since there are a substantial number of imported commodities, which are not produced in the United States or which are produced only in very small quantities and which, therefore, have no com-

parable domestic output classification. The relationships shown in this report should be considered only as approximations, since, in addition to those mentioned above, there are also the following problems affecting the comparability of the three sets of data:

(a) *Valuation*—There are different methods of valuation for the three types of data.

Domestic Output—Valued at the point of production. It includes the net sales price, f.o.b. plant, after discounts and allowances, exclusive of freight charges and excise taxes.

Exports—Valued at the point of exportation. It includes the selling price, or cost if not sold, and inland freight, insurance, and other charges to the export point.

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(b) *Duplication in Quantity and Value of Output*—Because producers' shipments of some commodities may be used as materials for incorporation into other commodities, combinations of data for such commodities may contain a certain amount of duplication. Thus, percentages of exports to output or imports to apparent consumption (output plus imports minus exports) at four-digit or broader levels may be understated. Where duplication is known to be substantial, the output data are appropriately noted in the table.

(c) *Low-Valued Export and Import Transactions*—Commodity information is not shown for individual imports valued under \$251. For exports, commodity information is not reported for shipments individually valued under \$251 effective October 1969 and for shipments valued under \$100 prior to October 1969. This is believed to have only negligible effect on the statistics for most commodities.

(d) *Manufacturers' Shipments, Not Specified by Kind*—The value of manufacturers' shipments at the four-digit industry level often includes a small amount which is not distributed among the individual five-digit product classes. Export and import percentages at the more detailed levels might, therefore, be slightly overstated.

(e) *Time Lag Between Output and Exports*—There will be a lag between the time a commodity is produced or shipped by the producer and the time it is actually exported, especially when intermediaries (wholesalers, exporters, etc.) are involved. Ordinarily, this type of discrepancy is insignificant in annual figures.

(f) *"Direct" vs "Total" Commodity Export and Imports*—Export and import data do not include materials which are incorporated into other more finished products and exported or imported in finished form. Thus, by showing only direct exports and imports, the relation of exports to output and imports to apparent consumption for intermediate products is considerably understated.

(g) *Used Commodities*—With a few exceptions, used or rebuilt commodities are classified in the same import or export codes as is new merchandise. Percentages are thus overstated to the extent that used or rebuilt products are significant in trade.

RELATED REPORTS

An annual Current Industrial Report is published in this series. The annual report summarizes monthly figures and incorporates all known revisions in the series for both current and previous year, thus, providing a single reference copy to replace the monthly publications. This annual summary provides additional information on the history of this survey.

The Bureau of the Census also publishes reports on related products as follows:

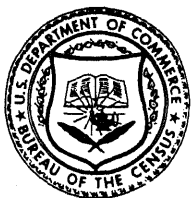
Series	Frequency	Title
<i>Current Industrial Reports</i>		
M3-1	Monthly	Manufacturers' Shipments, Inventories, and Orders
M20C	Monthly	Confectionery, Including Chocolate Products
<i>Foreign Trade Reports</i>		
FT-410	Monthly	U.S. Exports—Schedule B—Commodity by Country
FT-135	Monthly	U.S. General Imports—Schedule A—Commodity by Country

CONTACTS FOR DATA USERS

Subject Area	Contact	Phone Number
Current Industrial Report M20A	Geraldine Bynum	(301) 763-7807
Foreign Trade publications	Juanita Noone	(301) 763-5140
To order a Census Bureau publication	Daisy Williams	(301) 763-7472
To order Census Bureau microfiche	Dorothy Dunham	(301) 763-5511

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Flour Milling Products



U.S. Department of Commerce
BUREAU OF THE CENSUS

OCTOBER 1978

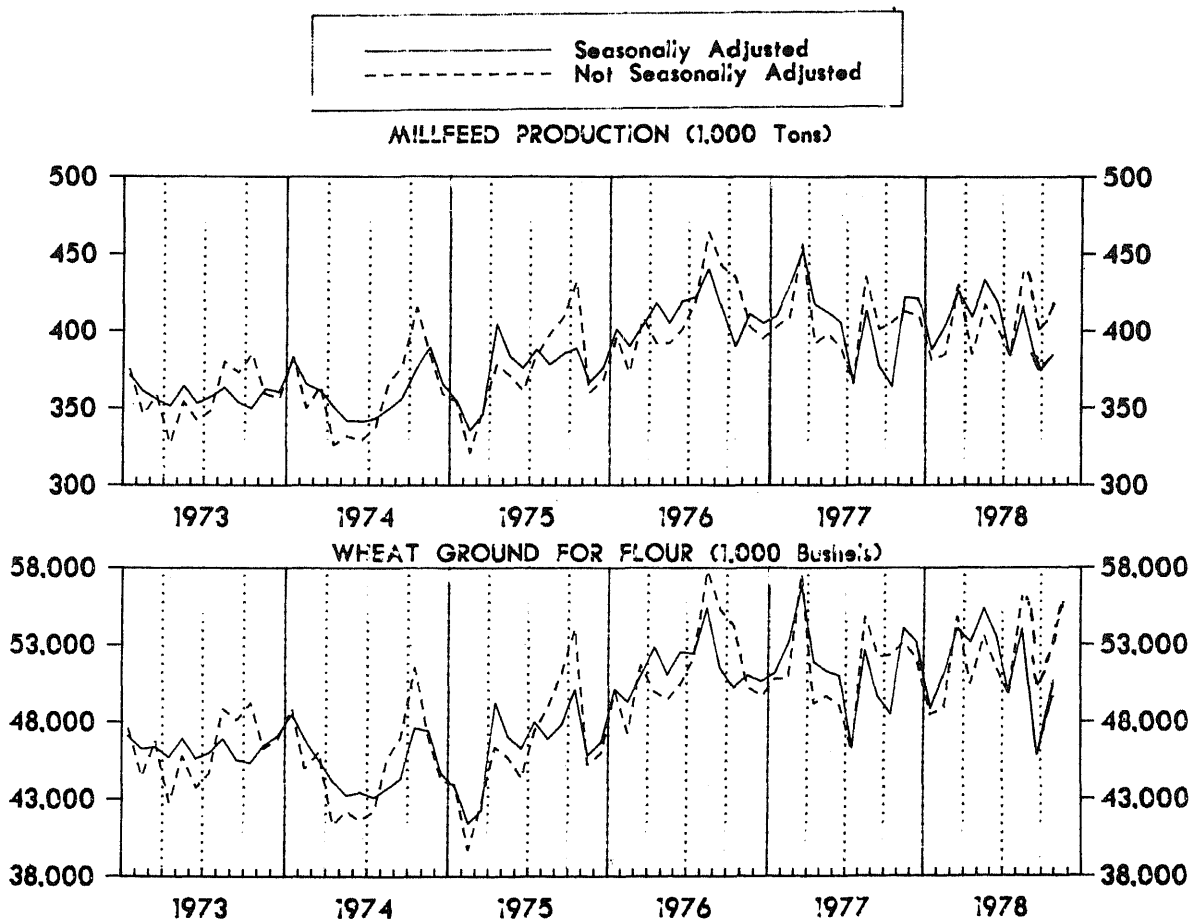
M20A(78)-10
Issued December 1978

The statistics in this publication are based on a survey of manufacturers and represent total U.S. production of flour milling products. Estimates are included for companies whose reports were not received in time for tabulation. A more

complete description of this survey appears on page 6. An annual Current Industrial Report is published in this series. The annual report includes all the months for the current and previous years and incorporates all known revisions in the series.

THIS REPORT INCLUDES DATA COMPARING DOMESTIC OUTPUT, EXPORTS, AND IMPORTS

WHEAT FLOUR MILLING: 1973 TO 1978



Address inquiries concerning these figures to U.S. Department of Commerce, Bureau of the Census, Industry Division, Washington, D.C. 20233, or call Geraldine Bynum, (301) 763-7807.

For sale by the Subscriber Services Section (Publications), Bureau of the Census, Washington, D.C. 20233, or any U.S. Department of Commerce district office. Postage stamps not acceptable; currency submitted at sender's risk. Remittances from foreign countries must be by international money order or by a draft on a U.S. bank. Price 25 cents per copy, \$3.30 per year.

Table 1A. SUMMARY OF WHEAT FLOUR MILLING: 1976 TO 1978

(Seasonally adjusted)

Month and year	Wheat flour production average per working day ¹ (1,000 cwt.)	Millfeed production (1,000 tons)	Wheat ground for flour (1,000 bushels)
1978			
October.....	1,074	389	51,232
September.....	1,022	376	46,962
August.....	1,071	416	53,899
July.....	1,100	384	49,849
June.....	1,096	419	53,580
May.....	1,146	433	55,373
April.....	1,173	409	53,191
March.....	1,077	426	54,064
February.....	1,076	404	51,054
January.....	1,003	388	48,870
1977			
December.....	1,086	421	53,169
November.....	1,101	422	54,078
October.....	1,043	364	48,519
September.....	1,060	377	48,599
August.....	1,045	413	52,633
July.....	1,064	366	46,334
June.....	1,036	405	51,010
May.....	1,063	412	51,331
April.....	1,087	417	51,882
March.....	1,144	452	56,839
February.....	1,121	429	53,069
January.....	1,089	410	51,210
1976			
December.....	977	405	50,653
November.....	1,033	411	51,039
October.....	1,075	390	50,255
September.....	1,055	415	51,532
August.....	1,154	440	55,388
July.....	1,086	422	52,460
June.....	1,058	419	52,531
May.....	1,123	405	51,071
April.....	1,065	418	52,853
March.....	1,023	404	51,031
February.....	1,038	390	49,318

¹The number of working days per month is computed on the basis of a 5-day week with allowances for the following holidays: January 1, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, and December 25.

Table 1B. SUMMARY OF WHEAT FLOUR MILLING: 1976 TO 1978

(Not seasonally adjusted)

Month and year	Wheat flour production (1,000 cwt.)		Millfeed production (tons)	Wheat ground for flour (1,000 bushels)	Wheat flour mill stocks ² (1,000 cwt.)	Daily 24-hour capacity in wheat flour ² (1,000 cwt.)	Wheat flour produced as percent of capacity	Flour extraction rate ³ (percent)
	Average per working day ¹	Calendar month total						
1978								
October.....	1,129	24,837	435,013	55,279	(NA)	1,057	106.8	74.8
September.....	1,123	22,456	400,437	50,531	3,342	1,057	106.2	74.0
August.....	1,089	25,052	437,676	56,109	(NA)	1,036	102.5	74.4
July.....	1,063	22,335	384,090	49,749	(NA)	1,036	100.1	74.8
June.....	1,047	23,051	401,878	51,544	3,459	1,036	101.1	74.5
May.....	1,094	24,078	417,032	53,601	(NA)	1,034	105.8	74.5
April.....	1,127	22,554	385,227	50,478	(NA)	1,034	109.1	74.5
March.....	1,057	24,330	430,260	54,821	4,096	1,034	102.3	73.8
February.....	1,089	21,738	385,269	48,910	(NA)	1,072	101.4	74.2
January.....	990	21,787	380,717	48,430	(NA)	1,072	92.4	74.9
1977								
December.....	1,062	23,363	410,169	52,106	4,160	1,072	99.1	74.7
November.....	1,133	23,785	412,818	53,159	(NA)	1,104	102.6	74.6
October.....	1,114	23,396	406,255	52,352	(NA)	1,104	100.9	74.5
September.....	1,113	23,381	401,384	52,244	3,782	1,104	100.8	74.6
August.....	1,062	24,419	435,359	54,844	(NA)	1,098	96.7	74.2
July.....	1,028	20,566	365,665	46,149	(NA)	1,098	93.7	74.3
June.....	990	21,769	388,922	49,072	4,456	1,098	90.1	73.9
May.....	1,053	22,121	398,051	49,688	(NA)	1,114	94.6	74.2
April.....	1,042	21,877	392,101	49,184	(NA)	1,114	93.5	74.1
March.....	1,121	25,787	456,406	57,635	4,542	1,114	100.6	74.6
February.....	1,136	22,716	408,870	50,840	(NA)	1,041	109.1	74.5
January.....	1,076	22,604	403,353	50,852	(NA)	1,041	103.4	74.1
1976								
December.....	959	22,058	395,380	49,691	4,633	1,041	92.1	74.0
November.....	1,062	22,297	402,738	50,273	(NA)	1,031	103.0	73.9
October.....	1,147	24,090	434,862	54,225	(NA)	1,031	111.3	74.0
September.....	1,117	24,572	442,353	55,294	3,870	1,031	108.3	74.1
August.....	1,169	25,715	463,992	57,825	(NA)	1,049	111.4	74.1
July.....	1,048	23,063	419,395	52,145	(NA)	1,049	99.9	73.7
June.....	1,015	22,328	401,357	50,430	4,191	1,049	96.8	73.8
May.....	1,106	22,127	391,547	49,488	(NA)	1,048	105.6	74.5
April.....	1,017	22,381	392,245	49,946	(NA)	1,048	97.1	74.7
March.....	1,003	23,076	407,721	51,695	4,818	1,048	95.7	74.4
February.....	1,054	21,078	372,617	47,296	(NA)	1,042	101.1	74.3

Note: Data include estimate for small mills.

(NA) Not available.

¹The number of working days per month is computed on the basis of a 5-day week with allowances for the following holidays: January 1, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, and December 25.²Collected quarterly.³Wheat flour production as compared with amount of wheat ground.

TABLE 2. QUANTITY OF DURUM WHEAT AND RYE FLOUR PRODUCTION, GRAIN CONSUMPTION
MILL STOCKS, AND CAPACITY

PRODUCT CODE	DESCRIPTION OF ITEM	UNIT OF MEASURE	OCTOBER 1978	SEPTEMBER 1978	OCTOBER 1977
	DURUM WHEAT (INCLUDED IN TABLE 1 DATA):				
0011173	DURUM WHEAT GROUND.	M BU	3,944	3,278	3,314
2041153	STRAIGHT SEMOLINA DURUM FLOUR	M CWT	1,696	1,468	1,431
2041155	BLENDED SEMOLINA DURUM FLOUR.	DO	(D)	(D)	(D)
	RYE:				
0011951	RYE GROUND FOR FLOUR.	M BU	340	290	313
2041611	RYE FLOUR PRODUCTION.	M CWT	149	129	136
2041618	RYE MILLFEED PRODUCTION	TONS	1,909	1,739	1,754
2041611	RYE FLOUR STOCKS (1).	M CWT	(NA)	16	(NA)
	24 HOUR CAPACITY (1).	DO	(NA)	10	10

Note: Data include estimates for small mills. Detail may not add to total due to independent rounding. These data exclude all flour blended by macaroni and spaghetti manufacturers, etc., as such activities are not within scope of this survey. Only mills engaged in milling flour or meal are included in this survey.

(D) Withheld to avoid disclosure of figures for individual companies. (NA) Not available.

¹Collected quarterly.

TABLE 3. QUANTITY OF WHEAT GROUND FOR FLOUR AND WHEAT FLOUR PRODUCTION, BY DIVISION AND STATES
(WHEAT GROUND FOR FLOUR IN THOUSANDS OF BUSHELS; WHEAT PRODUCTION IN THOUSANDS OF HUNDREDWEIGHT)

GEOGRAPHIC AREA	OCTOBER 1978		SEPTEMBER 1978		OCTOBER 1977	
	WHEAT GROUND FOR FLOUR	WHEAT FLOUR PRODUCTION	WHEAT GROUND FOR FLOUR	WHEAT FLOUR PRODUCTION	WHEAT GROUND FOR FLOUR	WHEAT FLOUR PRODUCTION
UNITED STATES, TOTAL.	55,279	24,837	50,531	22,456	52,352	23,396
MIDDLE ATLANTIC.	7,574	3,461	7,247	3,271	7,017	3,144
NEW YORK.	6,141	2,827	5,942	2,700	5,475	2,461
NORTH CENTRAL.	30,289	13,515	27,102	12,081	29,153	12,980
OHIO.	3,468	1,490	2,759	1,183	3,155	1,381
INDIANA.	1,434	608	1,312	565	1,387	599
ILLINOIS.	3,500	1,538	3,140	1,393	3,254	1,435
MICHIGAN.	967	428	914	390	895	398
MINNESOTA.	6,128	2,798	5,584	2,543	6,147	2,820
IOWA.	(D)	(D)	686	(D)	(D)	(D)
MISSOURI.	5,122	2,302	4,314	1,929	4,431	1,978
NEBRASKA.	(D)	(D)	1,584	(D)	(D)	(D)
KANSAS.	6,454	2,919	6,079	2,731	6,554	2,949
SOUTH ATLANTIC.	3,346	1,431	3,130	1,141	2,966	1,331
EAST SOUTH CENTRAL.	2,558	1,121	2,439	1,062	2,623	1,137
TENNESSEE.	1,968	868	1,828	801	2,068	898
WEST SOUTH CENTRAL.	3,206	1,436	3,269	1,474	3,252	1,455
OKLAHOMA.	1,244	573	1,416	653	1,198	550
TEXAS.	1,393	611	1,277	565	1,464	647
MOUNTAIN.	3,171	1,441	2,925	1,322	2,805	1,267
MONTANA.	770	358	737	344	673	319
UTAH.	(D)	678	(D)	594	(D)	(D)
PACIFIC.	5,087	2,432	4,419	2,105	4,536	2,082
WASHINGTON.	1,610	708	1,297	573	1,261	570
OREGON.	841	377	762	348	707	319
CALIFORNIA AND HAWAII.	2,684	1,354	2,360	1,184	2,568	1,193

Note: Detail may not add to total due to independent rounding.

(D) Withheld to avoid disclosure of figures for individual companies.

Table 4. EXPORTS OF WHEAT AND WHEAT FLOUR

Country to which exported	September 1978	August 1978	9 months through September 1978
WHEAT FLOUR, EXCEPT MEAL AND GROATS, DONATED FOR RELIEF OR CHARITY (1314010 AND 1314030) (1,000 cwt.)			
Total.....	277	100	1,710
Egypt.....	40	-	278
Guatemala.....	11	-	17
Colombia.....	3	-	20
Ecuador.....	2	-	4
Brazil.....	4	-	5
Israel.....	-	4	88
India.....	24	-	83
Chile.....	33	-	97
Sri Lanka (Ceylon).....	10	-	73
Philippine Republic.....	5	37	420
Morocco.....	15	59	364
Other.....	130	-	130
WHEAT FLOUR, WHOLLY U.S. WHEAT, EXCEPT DURUM FLOUR AND SEMOLINA (1314040) (1,000 cwt.)			
Total.....	1,857	1,860	15,627
Nicaragua.....	-	-	8
Jamaica.....	4	14	385
Brazil.....	2	-	2
Iceland.....	-	-	-
Jordan.....	-	-	12
Saudi Arabia.....	77	309	191
Sri Lanka (Ceylon).....	60	353	2,358
Egypt.....	841	952	3,418
Philippine Republic.....	-	-	6,419
Korean Republic.....	-	-	-
Morocco.....	-	-	-
Other.....	873	232	2,948
WHEAT, INCLUDING SPELT OR MESLIN, UNMILLED, NOT DONATED FOR RELIEF OR CHARITY (1306540) (1,000 bu.)			
Total.....	118,272	131,866	948,161
U.S.S.R.....	781	1,615	83,319
Venezuela.....	2,306	2,596	20,106
Peru.....	1,905	3,971	14,407
Brazil.....	922	4,885	87,952
Portugal.....	1,347	-	18,892
Iran.....	1,884	5,091	35,134
Indonesia.....	2,646	3,528	18,158
Korean Republic.....	7,365	5,243	44,210
China (Taiwan).....	2,686	999	16,667
Japan.....	13,515	10,458	91,362
Egypt.....	1,402	1,814	38,201
Nigeria.....	1,750	2,443	22,544
Other.....	79,764	74,682	388,785

Note: Data in this table are taken from Foreign Trade publication FT-410, U.S. Exports. The Schedule B codes are shown above.

- Represents zero.

Table 5. PRODUCTION, EXPORTS, IMPORTS AND APPARENT CONSUMPTION OF WHEAT PRODUCTION: SEPTEMBER 1978

(Quantity in 1,000 cwt.; value in thousands of dollars)

Product	Manufacturers' shipments		Export of domestic merchandise ¹		Percent exports to manufacturers' shipments		Imports for consumption ²		Calculated import duty	Apparent consumption ⁴	
	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value ³		Quantity	Value
Wheat flour.....	22,456	(NA)	2,134	17,932	10.5	(NA)	-	-	-	20,322	(NA)

Note: Comparison of Standard Industrial Classification codes Schedule B Export numbers, and TSUSA import numbers is as follows:

Domestic output	Exports	Imports
20411	131.4010-131.4040	-

- Represents zero. (NA) Not available.

¹Source: Bureau of Census Report FT-410, U.S. Exports, Commodity by Country.

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parable domestic output classification. The relationships shown in this report should be considered only as approximations, since, in addition to those mentioned above, there are also the following problems affecting the comparability of the three sets of data:

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Flour Milling Products



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NOVEMBER 1978

M20A(78)-11
Issued January 1979

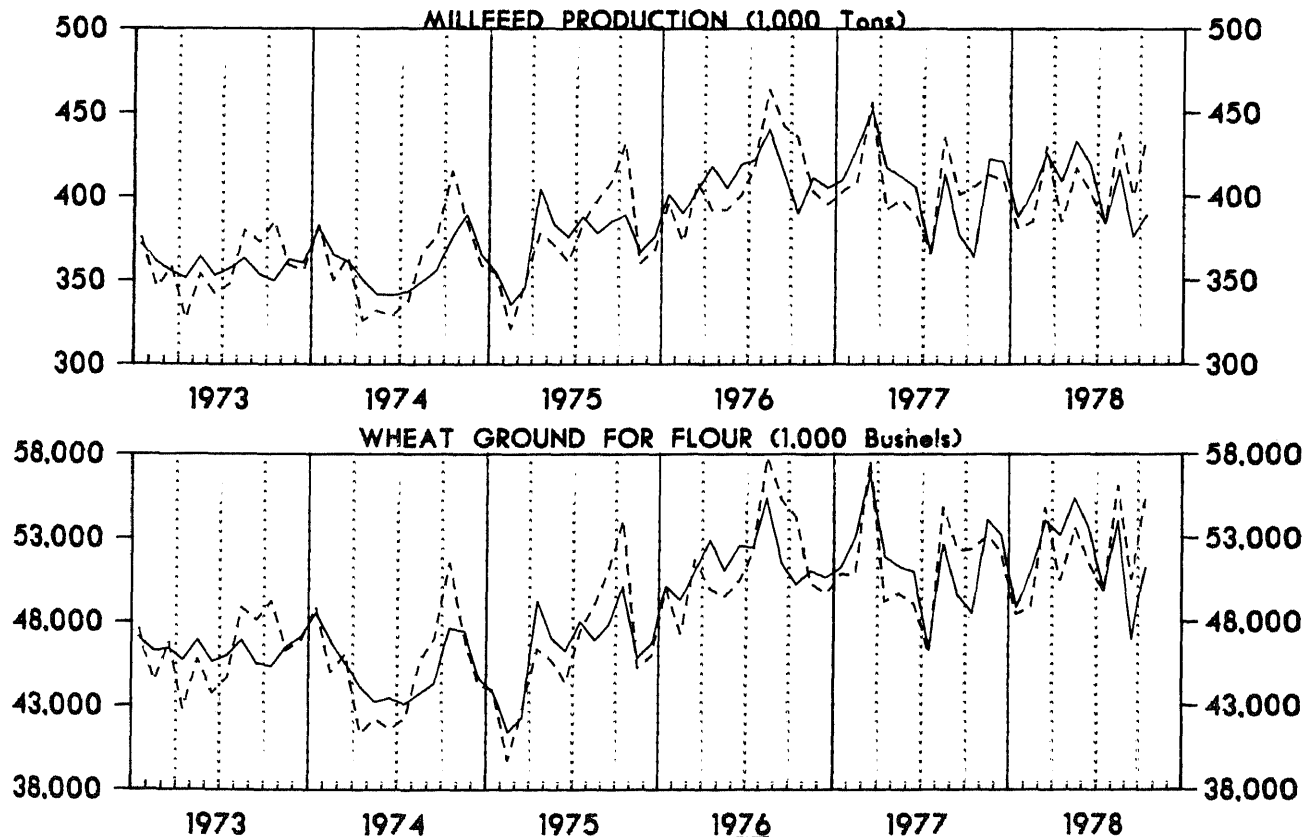
The statistics in this publication are based on a survey of manufacturers and represent total U.S. production of flour milling products. Estimates are included for companies whose reports were not received in time for tabulation. A more

complete description of this survey appears on page 6. An annual Current Industrial Report is published in this series. The annual report includes all the months for the current and previous years and incorporates all known revisions in the series.

THIS REPORT INCLUDES DATA COMPARING DOMESTIC OUTPUT, EXPORTS, AND IMPORTS

WHEAT FLOUR MILLING: 1973 TO 1978

— Seasonally Adjusted
- - - Not Seasonally Adjusted



Address inquiries concerning these figures to U.S. Department of Commerce, Bureau of the Census, Industry Division, Washington, D.C. 20233, or call Geraldine Bynum, (301) 763-7807.

For sale by the Subscriber Services Section (Publications), Bureau of the Census, Washington, D.C. 20233, or any U.S. Department of Commerce district office. Postage stamps not acceptable; currency submitted at sender's risk. Remittances from foreign countries must be by international money order or by a draft on a U.S. bank. Price 25 cents per copy, \$3.30 per year.

Table 1A. SUMMARY OF WHEAT FLOUR MILLING: 1976 TO 1978

(Seasonally adjusted)			
Month and year	Wheat flour production average per working day ¹ (1,000 cwt.)	Millfeed production (1,000 tons)	Wheat ground for flour (1,000 bushels)
1978			
November.....	1,101	426	53,847
October.....	1,057	391	51,296
September.....	1,069	375	46,939
August.....	1,071	417	53,854
July.....	1,100	384	49,849
June.....	1,096	419	53,580
May.....	1,146	433	55,373
April.....	1,173	409	53,191
March.....	1,077	426	54,064
February.....	1,076	404	51,054
January.....	1,003	388	48,870
1977			
December.....	1,086	421	53,169
November.....	1,101	422	54,078
October.....	1,043	364	48,519
September.....	1,060	377	48,599
August.....	1,045	413	52,633
July.....	1,064	366	46,334
June.....	1,036	405	51,010
May.....	1,063	412	51,331
April.....	1,087	417	51,882
March.....	1,144	452	56,839
February.....	1,121	429	53,069
January.....	1,089	410	51,210
1976			
December.....	977	405	50,653
November.....	1,033	411	51,039
October.....	1,075	390	50,255
September.....	1,055	415	51,532
August.....	1,154	440	55,388
July.....	1,086	422	52,460
June.....	1,058	419	52,531
May.....	1,123	405	51,071
April.....	1,065	418	52,853
March.....	1,023	404	51,031
February.....	1,038	390	49,318

¹The number of working days per month is computed on the basis of a 5-day week with allowances for the following holidays: January 1, Memorial Day, Independence Day, Thanksgiving Day, and December 25.

Table 1B. SUMMARY OF WHEAT FLOUR MILLING: 1976 TO 1978

(Not seasonally adjusted)

Month and year	Wheat flour production (1,000 cwt.)		Millfeed production (tons)	Wheat ground for flour (1,000 bushels)	Wheat flour mill stocks ² (1,000 cwt.)	Daily 24-hour capacity in wheat flour ² (1,000 cwt.)	Wheat flour produced as percent of capacity	Flour extraction rate ³ (percent)
	Average per working day ¹	Calendar month total						
1978								
November.....	1,133	23,803	416,247	52,932	(NA)	1,057	107.2	74.9
October.....	1,129	24,843	436,433	55,348	(NA)	1,057	106.8	74.6
September.....	1,119	22,395	400,263	50,506	3,342	1,057	105.9	73.9
August.....	1,089	25,053	438,773	56,062	(NA)	1,036	105.1	74.4
July.....	1,063	22,335	384,090	49,749	(NA)	1,036	100.1	74.8
June.....	1,047	23,051	401,878	51,544	3,459	1,036	101.1	74.5
May.....	1,094	24,078	417,032	53,601	(NA)	1,034	105.8	74.5
April.....	1,127	22,554	385,227	50,478	(NA)	1,034	109.1	74.5
March.....	1,057	24,330	430,260	54,821	4,096	1,034	102.3	73.8
February.....	1,089	21,738	385,269	48,910	(NA)	1,072	101.4	74.2
January.....	1,990	21,787	380,717	48,430	(NA)	1,072	92.4	74.9
1977								
December.....	1,062	23,363	410,169	52,106	4,160	1,072	99.1	74.7
November.....	1,133	23,785	412,818	53,159	(NA)	1,104	102.6	74.6
October.....	1,114	23,396	406,255	52,352	(NA)	1,104	100.9	74.5
September.....	1,113	23,381	401,384	52,244	3,782	1,104	100.8	74.6
August.....	1,062	24,419	435,359	54,844	(NA)	1,098	96.7	74.2
July.....	1,028	20,566	365,665	46,149	(NA)	1,098	93.7	74.3
June.....	990	21,769	388,922	49,072	4,456	1,098	90.1	73.9
May.....	1,053	22,121	398,051	49,688	(NA)	1,114	94.6	74.2
April.....	1,042	21,877	392,101	49,184	(NA)	1,114	93.5	74.1
March.....	1,121	25,787	456,406	57,635	4,542	1,114	100.6	74.6
February.....	1,136	22,716	408,870	50,840	(NA)	1,041	109.1	74.5
January.....	1,076	22,604	403,353	50,852	(NA)	1,041	103.4	74.1
1976								
December.....	959	22,058	395,380	49,691	4,633	1,041	92.1	74.0
November.....	1,062	22,297	402,738	50,273	(NA)	1,031	103.0	73.9

(NA) Not available.

¹The number of working days per month is computed on the basis of a 5-day week with allowances for the following holidays: January 1, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, and December 25. ²Collected quarterly. ³Wheat flour production as compared with amount of wheat ground.

Table 2. QUANTITY OF DURUM WHEAT AND RYE FLOUR PRODUCTION, GRAIN CONSUMPTION MILL STOCKS, AND CAPACITY

Product code	Description of item	Unit of measure	November 1978	October 1978	November 1977
00111 73	Durum wheat (included in table 1 data):				
	Durum wheat ground ¹	M bu.....	3,619	4,012	3,174
20411 53	Straight semolina durum flour.....	M cwt.....	1,608	1,726	1,349
20411 55	Blended semolina durum flour.....	..do.....	(D)	(D)	(D)
00119 51	Rye:				
	Rye ground for flour.....	M bu.....	366	340	332
20416 11	Rye flour production.....	M cwt.....	159	149	149
20416 18	Rye millfeed production.....	Tons.....	2,183	1,909	1,894
20416 11	Rye flour stocks ¹	M cwt.....	(NA)	(NA)	(NA)
	24 hour capacity ¹.....	..do.....	10	10,135	10

Note: Data include estimates for small mills. Detail may not add to total due to independent rounding. These data exclude all flour blended by macaroni and spaghetti manufacturers, etc., as such activities are not within scope of this survey. Only mills engaged in milling flour or meal are included in this survey.

(D) Withheld to avoid disclosure of figures for individual companies. (NA) Not available.

¹Collected quarterly.

Table 3. QUANTITY OF WHEAT GROUND FOR FLOUR AND WHEAT FLOUR PRODUCTION, BY DIVISION AND STATES

(Wheat ground for flour in thousands of bushels; wheat production in thousands of hundredweight)

Geographic area	November 1978		October 1978		November 1977	
	Wheat ground for flour	Wheat flour production	Wheat ground for flour	Wheat flour production	Wheat ground for flour	Wheat flour production
United States, total.....	52,932	23,803	55,348	24,843	53,159	23,785
Middle Atlantic.....	7,472	3,367	7,574	3,461	7,207	3,426
New York.....	5,939	2,678	6,141	2,827	5,583	2,499
North Central.....	27,966	12,629	30,221	13,520	28,770	12,329
Ohio.....	2,878	1,269	3,401	1,495	2,985	1,303
Indiana.....	1,331	572	1,434	608	1,225	587
Illinois.....	3,050	1,347	3,500	1,538	3,215	1,424
Michigan.....	867	383	966	428	563	387
Minnesota.....	6,180	2,813	6,128	2,798	5,930	2,703
Iowa.....	(D)	(D)	(D)	(D)	(D)	(D)
Missouri.....	4,599	2,073	5,122	2,302	4,989	2,233
Nebraska.....	(D)	(D)	(D)	(D)	(D)	(D)
Kansas.....	5,797	2,940	6,454	2,919	6,448	3,305
South Atlantic.....	3,525	1,542	3,306	1,431	3,318	1,654
East South Central.....	2,408	1,054	2,558	1,121	2,666	1,155
Tennessee.....	1,852	817	1,968	868	2,147	931
West South Central.....	3,404	1,521	3,199	1,436	3,405	1,653
Oklahoma.....	1,241	569	1,244	573	1,367	630
Texas.....	1,609	708	1,386	611	1,495	664
Mountain.....	3,051	1,390	3,171	1,441	3,044	1,381
Montana.....	826	382	770	358	772	367
Utah.....	(D)	(D)	(D)	(D)	(D)	(D)
Pacific.....	5,106	2,300	5,319	2,433	4,749	2,187
Washington.....	1,475	652	1,572	699	1,321	597
Oregon.....	763	350	818	382	722	329
California and Hawaii.....	2,868	1,298	2,929	1,352	2,706	1,261

Note: Detail may not add to total due to independent rounding.

(D) Withheld to avoid disclosure of figures for individual companies.

Table 4. EXPORTS OF WHEAT AND WHEAT FLOUR

Country to which exported	October 1978	September 1978	10 months through October 1978
WHEAT FLOUR, EXCEPT MEAL AND GROATS, DONATED FOR RELIEF OR CHARITY (1314010 AND 1314030) (1,000 cwt.)			
Total.....	342	277	2,052
Egypt.....	18	40	296
Guatemala.....	-	11	17
Colombia.....	5	3	25
Ecuador.....	-	2	4
Brazil.....	-	4	5
Israel.....	2	-	90
India.....	37	24	120
Chile.....	23	33	120
Sri Lanka (Ceylon).....	-	10	73
Philippine Republic.....	20	5	440
Morocco.....	65	15	429
Other.....	172	130	302
WHEAT FLOUR, WHOLLY U.S. WHEAT, EXCEPT DURUM FLOUR AND SEMOLINA (1314040) (1,000 cwt)			
Total.....	1,448	1,857	17,075
Nicaragua.....	33	-	41
Jamaica.....	71	4	456
Brazil.....	-	2	2
Iceland.....	-	-	-
Jordan.....	-	-	12
Saudi Arabia.....	278	77	469
Sri Lanka (Ceylon).....	705	60	3,063
Egypt.....	307	841	3,725
Philippine Republic.....	-	-	6,419
Korean Republic.....	-	-	-
Morocco.....	-	-	-
Other.....	54	873	3,002
WHEAT, INCLUDING SPELT OR MESLIN, UNMILLED, NOT DONATED FOR RELIEF OR CHARITY (1306540) (1,000 bu.)			
Total.....	112,961	118,273	1,054,651
U.S.S.R.....	4,650	784	102,517
Venezuela.....	2,242	2,306	22,348
Peru.....	845	1,905	15,252
Brazil.....	1,852	922	89,804
Portugal.....	3,715	1,347	17,516
Iran.....	3,785	1,884	40,552
Indonesia.....	1,823	2,646	17,384
Korean Republic.....	5,128	7,365	52,756
China (Taiwan).....	3,290	2,685	19,956
Japan.....	9,765	13,515	101,127
Egypt.....	2,094	1,402	40,295
Nigeria.....	2,656	1,750	25,245
Other.....	71,116	79,762	509,899

Note: Data in this table are taken from Foreign Trade publication FT-410, U.S. Exports. The Schedule B codes are shown above.
- Represents zero.

Table 5. PRODUCTION, EXPORTS, IMPORTS AND APPARENT CONSUMPTION OF WHEAT PRODUCTION: OCTOBER 1978

(Quantity in 1,000 cwt.; value in thousands of dollars)

Product	Manufacturers' shipments		Export of domestic merchandise ¹		Percent exports to manufacturers' shipments		Imports for consumption ²		Calculated import duty	Apparent consumption ⁴	
	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value ³		Quantity	Value
Wheat flour.....	24,843	(NA)	1,960	15,878	6.4	(NA)	-	-	-	22,883	(NA)

Note: Comparison of Standard Industrial Classification codes, Schedule B export numbers, and TSUSA import numbers is as follows:

Domestic output	Exports	Imports
20411	131.4010-131.4040	-

- Represents zero. (NA) Not available.

¹Source: Bureau of the Census Report FT-410, U.S. Exports, Commodity by Country.

²Source: Bureau of the Census Report IM-146, Imports for Consumption.

³This dollar value represents the c.i.f. (cost, insurance, and freight) value at first port of entry in the United States plus U.S. import duties.

⁴Apparent consumption represents domestic production plus imports minus exports.

DESCRIPTION OF SURVEY

Scope of Survey—This survey covers firms engaged in the production of wheat and rye flour.

Sampling Description—The data shown in this publication were collected on Bureau of the Census monthly Form M20A, Flour Milling Products. The aggregates published in this report have been compiled from a sample of approximately 250 respondents, accounting for 98 percent of the total U.S. production of flour mill products. The universe for this sample was the 1958 Census of Manufactures. The reporting panel consists of mills with a daily capacity of over 400 sacks of flour. Approximately 200 small establishments are in the nonmail universe. Their production data are estimated based upon their 1958 Census of Manufactures report. The monthly reporting panel was selected by arraying the reporting units in descending order by size for each product line, then choosing a sufficient number of respondents (beginning with the largest) to yield a coverage of approximately 98 percent for each product line.

The data for 1977 and 1976 as shown in tables 1A and 1B of this report have been revised. Approximately six establishments were added to this survey in January 1978 based upon an extensive reconciliation with the 1976 Annual Survey of Manufactures (ASM). Data for 1976 and 1977 have been estimated for these plants based upon their 1976 ASM data and their 1978 M20A reports. Revised State data for 1976 and 1977 will be shown in a separate report to be issued in the next few weeks.

Survey Error—The figures for the current month include estimates for respondents in the reporting panel whose reports were not received in time for tabulation, as well as for 200 small respondents excluded from the mail panel. Missing figures for companies in the reporting panel are "imputed" from the month-to-month movements shown by reporting firms. The overall imputation rate is generally limited to 12 percent, including about 2 percent for small respondents excluded from the monthly reporting panel. Individual items with imputation rates greater than 12 percent are footnoted.

The imputation rate is not an explicit indicator of the potential error in published figures due to nonresponse, both because the actual monthly movements for nonrespondents may or may not closely agree with the imputed movements and because the estimates for nonpanel cases may or may not reflect their current activity. The probable difference between the actual and imputed figures is unknown. The degree of uncertainty regarding the accuracy of the data, however, increases as the percentage of imputation increases. Figures with imputation rates above 12 percent, particularly, should be used with caution.

Revision to Previous Period Data—Statistics for previous months may be revised due to receipt of corrected data from respondents, including late reports for which imputations were previously made as described above, and other corrections. Figures which have been revised by more than 5 percent from previously published figures are indicated by footnotes.

Reporting Period Adjustment—Since January 1975, the data have been adjusted for the number of working days in the reporting period in order to compensate for differences in individual company reporting patterns, i.e., calendar month, 4-week, 5-week periods.

Seasonal Adjustment—This report presents seasonally adjusted data in table 1A for selected series shown in table 1B. The data were seasonally adjusted using the X-11 variant of the Bureau of the Census Method II seasonal adjustment program. This seasonal adjustment program is a ratio-to-moving average method. The seasonal adjustment program largely eliminates the effect of seasonal variations (intra-year variations repeated constantly from year to year) within the series. The seasonally adjusted data usually provide a better measure than the not seasonally adjusted (original) data of the month-to-month variations which are due to factors other than seasonal pattern.

EXPLANATION OF TERMS

Units of Quantity—Grain ground is measured in bushels of 60 pounds for wheat, and 56 pounds for rye. Flour production is measured in sacks of 100 pounds.

Capacity—Based on replies to the question, "What is the maximum quantity of flour that can be produced in your mill in one day if operated for 24 hours?", the capacity of idle mills is included until the mills are reported to be destroyed, dismantled, or abandoned.

Grain—Represents the purchased weight of grain ground, including the weight of foreign material (dockage).

Millfeed—Includes bran, middlings, shorts, and other milling by products intended principally for use as feed materials.

Wheat Flour—Includes whole wheat flour, farina, industrial flour, and durum flour.

Stocks of Flour (quarterly)—Represents mill stocks in all position, sold and unsold.

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Flour Milling Products



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DECEMBER 1978

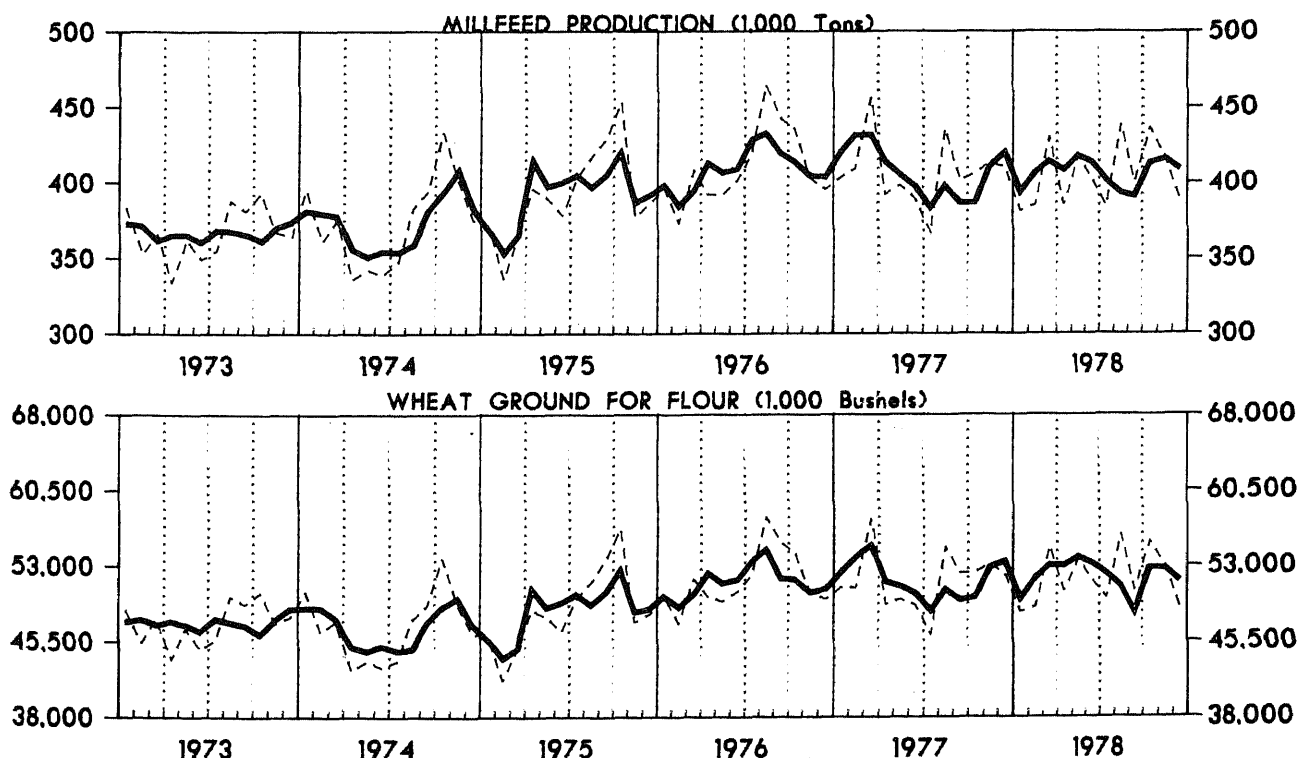
M20A(78)-12
Issued February 1979

This report includes revised monthly data for 1973 to 1975 as shown in table 2. These revisions are based upon a reconciliation between the M-20A monthly flour milling report and the 1976 Annual Survey of Manufactures (ASM). Approximately six establishments were added to this survey in January 1978 based on this reconciliation. Data for these plants for 1973 to 1975 have been estimated based upon the information submitted by these plants to the Bureau on their ASM reports. Revised monthly data for 1976 and 1977 were published in November 1978.

THIS REPORT INCLUDES DATA COMPARING DOMESTIC OUTPUT, EXPORTS, AND IMPORTS

WHEAT FLOUR MILLING: 1973 TO 1978

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- - - Not Seasonally Adjusted



Address inquiries concerning these figures to U.S. Department of Commerce, Bureau of the Census, Industry Division, Washington, D.C. 20233, or call Geraldine Bynum, (301) 763-7807.
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Table 1A. SUMMARY OF WHEAT FLOUR MILLING: 1977 AND 1978

(Seasonally adjusted)

Month and year	Wheat flour production average per working day ¹ (1,000 cwt.)	Millfeed production (1,000 tons)	Wheat ground for flour (1,000 bushels)
1978			
December.....	1,078	400	51,435
November.....	1,093	415	52,728
October.....	1,084	412	52,742
September.....	1,040	390	48,335
August.....	1,087	393	50,886
July.....	1,069	401	52,176
June.....	1,124	413	53,196
May.....	1,111	417	53,821
April.....	1,108	408	53,000
March.....	1,122	413	53,010
February.....	1,096	406	51,788
January.....	1,016	393	49,714
1977			
December.....	1,072	419	53,399
November.....	1,089	410	52,846
October.....	1,028	386	49,905
September.....	1,075	386	49,609
August.....	1,060	397	50,659
July.....	1,044	383	48,499
June.....	1,044	397	50,196
May.....	1,061	405	50,954
April.....	1,058	413	51,443
March.....	1,180	431	54,965
February.....	1,145	431	53,775
January.....	1,060	419	52,359

Note: The data as shown above have been revised based upon new seasonal factors published in February 1979 in series M20A Supplement, Flour Milling Products, Seasonal Adjustment Supplement, 1971-1978.

¹The number of working days per month is computed on the basis of a 5-day week with allowances for the following holidays: January 1, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, and December 25.

Table 1B. SUMMARY OF WHEAT FLOUR MILLING: 1977 AND 1978

(Not seasonally adjusted)

Month and year	Wheat flour production (1,000 cwt.)		Millfeed production (tons)	Wheat ground for flour (1,000 bushels)	Wheat flour mill stocks ² (1,000 cwt.)	Daily 24-hour capacity in wheat flour ² (1,000 cwt.)	Wheat flour produced as percent of capacity	Flour extraction rate ³ (percent)
	Average per working day ¹	Calendar month total						
1978								
December.....	1,089	21,791	381,332	48,893	3,214	1,049	103.9	74.3
November.....	1,130	23,738	416,152	52,934	(NA)	1,057	106.9	74.7
October.....	1,129	24,843	436,433	55,348	(NA)	1,057	106.8	74.6
September.....	1,119	22,395	400,263	50,506	3,342	1,057	105.9	73.9
August.....	1,089	25,053	438,773	56,062	(NA)	1,036	105.1	74.4
July.....	1,063	22,335	384,090	49,749	(NA)	1,036	100.1	74.8
June.....	1,047	23,051	401,878	51,544	3,459	1,036	101.1	74.5
May.....	1,094	24,078	417,032	53,601	(NA)	1,034	105.8	74.5
April.....	1,127	22,554	385,227	50,478	(NA)	1,034	109.1	74.5
March.....	1,057	24,330	430,260	54,821	4,096	1,034	102.3	73.8
February.....	1,089	21,738	385,269	48,910	(NA)	1,072	101.4	74.2
January.....	990	21,787	380,717	48,430	(NA)	1,072	92.4	74.9
1977								
December.....	1,062	23,363	410,169	52,106	4,160	1,072	99.1	74.7
November.....	1,133	23,785	412,818	53,159	(NA)	1,104	102.6	74.6
October.....	1,114	23,396	406,255	52,352	(NA)	1,104	100.9	74.5
September.....	1,113	23,381	401,384	52,244	3,782	1,104	100.8	74.6
August.....	1,062	24,419	435,359	54,844	(NA)	1,098	96.7	74.2
July.....	1,028	20,566	365,665	46,149	(NA)	1,098	93.7	74.3
June.....	990	21,769	388,922	49,072	4,456	1,098	90.1	73.9
May.....	1,053	22,121	398,051	49,688	(NA)	1,114	94.6	74.2
April.....	1,042	21,877	392,101	49,184	(NA)	1,114	93.5	74.1
March.....	1,121	25,787	456,406	57,635	4,542	1,114	100.6	74.6
February.....	1,136	22,716	408,870	50,840	(NA)	1,041	109.1	74.5
January.....	1,076	22,604	403,353	50,852	(NA)	1,041	103.4	74.1

(NA) Not available.

¹The number of working days per month is computed on the basis of a 5-day week with allowances for the following holidays: January 1, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, and December 25. ²Collected quarterly. ³Wheat flour production as compared with amount of wheat ground.

Table 2. WHEAT FLOUR MILLING 1973 TO 1975 REVISED

(Not seasonally adjusted)

Month and year	Wheat flour produc- tion (1,000 cwt.)		Millfeed production (tons)	Wheat ground for flour (1,000 bushels)	Wheat flour mill stocks (1,000 cwt.)	Daily 24- hour capacity in wheat flour (1,000 cwt.)	Wheat flour produced as percent of capacity	Flour extraction rate ² (percent)	Average pounds per cwt. sack of flour	
	Average per working day ¹	Calendar month total							Wheat	Millfeed
1975										
December.....	978	21,519	385,691	48,212	4,201	1,042	93.9	74.4	134.4	35.8
November.....	1,171	21,082	377,344	47,421	(NA)	1,043	112.3	74.1	135.0	35.8
October.....	1,100	25,297	452,912	56,685	(NA)	1,043	105.5	74.4	134.4	35.8
September.....	1,132	23,774	428,709	53,627	4,451	1,043	108.5	73.9	135.3	36.1
August.....	1,083	22,751	417,181	51,379	(NA)	1,036	104.6	73.8	135.5	36.7
July.....	1,008	22,176	402,515	49,718	(NA)	1,036	97.3	74.3	134.5	36.3
June.....	980	20,577	378,397	46,513	4,766	1,036	94.6	73.7	135.6	36.8
May.....	1,016	21,341	388,856	47,919	(NA)	1,007	100.9	74.2	134.7	36.4
April.....	981	21,590	396,185	48,602	(NA)	1,007	97.5	74.0	135.1	36.7
March.....	951	19,972	365,815	44,896	5,112	1,007	94.4	74.1	134.9	36.6
February.....	925	18,502	336,437	41,658	(NA)	1,010	91.6	74.0	135.1	36.4
January.....	927	20,404	371,059	46,045	(NA)	1,010	91.8	73.9	135.4	36.4
1974										
December.....	979	20,550	375,291	46,280	4,800	1,010	96.9	74.0	135.1	36.5
November.....	1,090	21,795	401,347	49,135	(NA)	1,038	105.0	73.9	135.3	36.8
October.....	1,036	23,818	433,206	53,771	(NA)	1,038	99.8	73.8	135.5	36.4
September.....	1,088	21,752	393,556	49,104	4,145	1,038	104.8	73.8	135.4	36.2
August.....	962	21,165	383,223	47,665	(NA)	1,036	92.9	74.0	135.1	36.2
July.....	878	19,320	347,522	43,565	(NA)	1,036	84.8	73.9	135.3	36.0
June.....	960	19,190	339,254	42,932	3,933	1,036	92.6	74.5	134.2	35.4
May.....	887	19,516	342,368	43,535	(NA)	1,024	86.6	74.7	133.8	35.1
April.....	867	19,063	336,176	42,657	(NA)	1,024	84.6	74.5	134.3	35.3
March.....	973	21,407	375,344	47,498	5,558	1,024	95.0	75.1	133.1	35.1
February.....	1,093	20,768	360,896	46,416	(NA)	990	110.4	74.6	134.1	34.8
January.....	1,034	22,753	394,924	50,404	(NA)	990	104.5	75.2	132.9	34.7
1973										
December.....	1,071	21,424	363,578	47,926	5,736	990	108.2	74.5	134.2	33.9
November.....	1,005	21,104	366,807	47,274	(NA)	1,039	96.7	74.4	134.4	34.8
October.....	1,069	22,459	392,989	50,325	(NA)	1,039	102.9	74.4	134.4	35.0
September.....	1,103	22,057	380,802	49,154	4,349	1,039	106.1	74.8	133.7	34.5
August.....	972	22,367	387,739	49,944	(NA)	1,061	91.7	74.6	134.0	34.7
July.....	976	20,502	355,315	45,647	(NA)	1,061	92.0	74.9	133.6	34.7
June.....	962	20,199	349,205	44,713	5,618	1,061	90.7	75.3	132.8	34.6
May.....	957	21,049	361,705	46,800	(NA)	1,054	90.8	75.0	133.4	34.4
April.....	939	19,728	333,816	43,717	(NA)	1,054	89.1	75.2	133.0	33.8
March.....	978	21,507	366,040	47,790	5,813	1,054	92.8	75.0	133.3	34.0
February.....	1,023	20,457	353,326	45,438	(NA)	1,016	100.7	75.0	133.3	34.5
January.....	991	21,808	383,218	48,559	(NA)	1,016	97.6	74.9	133.6	35.1

(NA) Not available.

¹The number of working days per month is computed on the basis of a 5-day week with allowances for the following holidays, unless such holidays fall on Saturday: January 1, May 30, July 4, Labor Day, Thanksgiving Day, and December 25.

²Wheat flour production as compared with amount of wheat ground.

Table 3. QUANTITY OF DURUM WHEAT AND RYE FLOUR PRODUCTION, GRAIN CONSUMPTION MILL STOCKS, AND CAPACITY

Product code	Description of item	Unit of measure	December 1978	November 1978	December 1977
00111 73	Durum wheat (included in table 1 data):				
20411 53	Durum wheat ground ¹	M bu.....	3,262	3,619	3,214
20411 55	Straight semolina durum flour.....	M cwt.....	1,452	1,608	1,427
	Blended semolina durum flour.....	..do.....	(D)	(D)	(D)
00119 51	Rye:				
20416 11	Rye ground for flour.....	M bu.....	349	366	334
20416 11	Rye flour production.....	M cwt.....	151	159	153
20416 18	Rye millfeed production.....	Tons.....	1,975	2,183	1,788
20416 11	Rye flour stocks ¹	M cwt.....	23	(NA)	24
	24 hour capacity ¹.....	..do.....	10	10	10

Note: Data include estimates for small mills. Detail may not add to total due to independent rounding. These data exclude all flour blended by macaroni and spaghetti manufacturers, etc., as such activities are not within scope of this survey. Only mills engaged in milling flour or meal are included in this survey.

(D) Withheld to avoid disclosure of figures for individual companies. (NA) Not available.

¹Collected quarterly.

Table 4. QUANTITY OF WHEAT GROUND FOR FLOUR AND WHEAT FLOUR PRODUCTION, BY DIVISION AND STATES

(Wheat ground for flour in thousands of bushels; wheat production in thousands of hundredweight)

Geographic area	December 1978		November 1978		December 1977	
	Wheat ground for flour	Wheat flour production	Wheat ground for flour	Wheat flour production	Wheat ground for flour	Wheat flour production
United States, total.....	48,893	21,791	52,934	23,738	52,106	23,363
Middle Atlantic.....	7,204	3,236	7,472	3,367	7,143	3,158
New York.....	5,862	2,645	5,932	2,678	5,677	2,507
North Central.....	25,201	11,291	27,966	12,560	27,338	12,305
Ohio.....	2,656	1,165	2,878	1,269	3,195	1,398
Indiana.....	1,314	561	1,331	572	1,272	549
Illinois.....	2,625	1,175	3,050	1,347	2,594	1,148
Michigan.....	724	320	867	383	803	349
Minnesota.....	5,718	2,592	6,180	2,813	5,447	2,491
Iowa.....	(D)	(D)	(D)	(D)	(D)	(D)
Missouri.....	3,900	1,767	4,599	2,073	4,298	1,947
Nebraska.....	(D)	(D)	(D)	(D)	(D)	(D)
Kansas.....	5,436	2,475	5,797	2,640	6,736	3,086
South Atlantic.....	3,209	1,411	3,525	1,542	4,182	1,831
East South Central.....	2,415	1,053	2,408	1,054	2,744	1,195
Tennessee.....	1,846	813	1,852	817	2,196	961
West South Central.....	3,368	1,434	3,404	1,521	3,431	1,548
Oklahoma.....	1,258	579	1,241	569	1,301	598
Texas.....	1,378	597	1,609	708	1,355	606
Mountain.....	2,797	1,243	3,051	1,390	2,981	1,353
Montana.....	721	326	826	382	704	331
Utah.....	(D)	(D)	(D)	(D)	(D)	(D)
Pacific.....	4,699	2,123	5,108	2,304	4,287	1,973
Washington.....	1,303	591	1,475	661	1,123	510
Oregon.....	776	351	771	351	657	302
California and Hawaii.....	2,620	1,181	2,862	1,292	2,507	1,161

Note: Detail may not add to total due to independent rounding.

(D) Withheld to avoid disclosure of figures for individual companies.

Table 5. EXPORTS OF WHEAT AND WHEAT FLOUR

Country to which exported	November 1978	October 1978	11 months through November 1978
WHEAT FLOUR, EXCEPT MEAL AND GROATS, DONATED FOR RELIEF OR CHARITY (1314010 AND 1314030) (1,000 cwt.)			
Total.....	246	342	2,298
Egypt.....	-	18	296
Guatemala.....	7	-	24
Colombia.....	-	5	25
Ecuador.....	-	-	4
Brazil.....	-	-	5
Israel.....	19	2	109
India.....	-	37	120
Chile.....	43	23	163
Sri Lanka (Ceylon).....	22	-	95
Philippine Republic.....	101	20	541
Morocco.....	46	65	475
Other.....	8	172	310
WHEAT FLOUR, WHOLLY U.S. WHEAT, EXCEPT DURUM FLOUR AND SEMOLINA (1314040) (1,000 cwt)			
Total.....	306	1,448	17,381
Nicaragua.....	-	33	41
Jamaica.....	34	71	490
Brazil.....	-	-	2
Iceland.....	39	-	39
Jordan.....	-	-	-
Saudi Arabia.....	116	278	585
Sri Lanka (Ceylon).....	13	705	3,076
Egypt.....	-	307	3,725
Philippine Republic.....	-	-	6,419
Korean Republic.....	-	-	-
Morocco.....	-	-	-
Other.....	104	-	3,106
WHEAT, INCLUDING SPELT OR MESLIN, UNMILLED, NOT DONATED FOR RELIEF OR CHARITY (1306540) (1,000 bu.)			
Total.....	92,314	112,961	1,146,965
U.S.S.R.....	940	4,650	103,457
Venezuela.....	2,627	2,242	24,925
Peru.....	22	845	15,274
Brazil.....	9,803	1,852	99,607
Portugal.....	1,328	3,715	18,844
Iran.....	2,846	3,785	43,398
Indonesia.....	1,422	1,823	18,806
Korean Republic.....	3,899	5,128	56,655
China (Taiwan).....	-	3,290	19,950
Japan.....	9,393	9,765	110,520
Egypt.....	-	2,094	40,295
Nigeria.....	3,616	2,656	28,861
Other.....	56,368	71,116	566,267

Note: Data in this table are taken from Foreign Trade publication FT-410, U.S. Exports. The Schedule B codes are shown above.
- Represents zero.

Table 6. PRODUCTION, EXPORTS, IMPORTS AND APPARENT CONSUMPTION OF WHEAT PRODUCTION: NOVEMBER 1978

(Quantity in 1,000 cwt.; value in thousands of dollars)

Product	Manufacturers' shipments		Export of domestic merchandise ¹		Percent exports to manufacturers' shipments		Imports for consumption ²		Calculated import duty	Apparent consumption ⁴	
	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value ³		Quantity	Value
Wheat flour.....	23,738	(NA)	552	4,405	4.3	(NA)	-	-	-	23,186	(NA)

Note: Comparison of Standard Industrial Classification codes, Schedule B export numbers, and TSUSA import numbers is as follows:

Domestic output	Exports	Imports
20411	131.4010-131.4040	-

- Represents zero. (NA) Not available.

¹Source: Bureau of the Census Report FT-410, U.S. Exports, Commodity by Country.

²Source: Bureau of the Census Report IM-146, Imports for Consumption.

³This dollar value represents the c.i.f. (cost, insurance, and freight) value at first port of entry in the United States plus U.S. import duties.

⁴Apparent consumption represents domestic production plus imports minus exports.

DESCRIPTION OF SURVEY

Scope of Survey—This survey covers firms engaged in the production of wheat and rye flour.

Sampling Description—The data shown in this publication were collected on Bureau of the Census monthly Form M20A, Flour Milling Products. The aggregates published in this report have been compiled from a sample of approximately 250 respondents, accounting for 98 percent of the total U.S. production of flour mill products. The universe for this sample was the 1958 Census of Manufactures. The reporting panel consists of mills with a daily capacity of over 400 sacks of flour. Approximately 200 small establishments are in the nonmail universe. Their production data are estimated based upon their 1958 Census of Manufactures report. The monthly reporting panel was selected by arraying the reporting units in descending order by size for each product line, then choosing a sufficient number of respondents (beginning with the largest) to yield a coverage of approximately 98 percent for each product line.

Survey Error—The figures for the current month include estimates for respondents in the reporting panel whose reports were not received in time for tabulation, as well as for 200 small respondents excluded from the mail panel. Missing figures for companies in the reporting panel are "imputed" from the month-to-month movements shown by reporting firms. The overall imputation rate is generally limited to 12 percent, including about 2 percent for small respondents excluded from the monthly reporting panel. Individual items with imputation rates greater than 12 percent are footnoted.

The imputation rate is not an explicit indicator of the potential error in published figures due to nonresponse, both because the actual monthly movements for nonrespondents may or may not closely agree with the imputed movements and because the estimates for nonpanel cases may or may not reflect their current activity. The probable difference between the actual and imputed figures is unknown. The degree of uncertainty regarding the accuracy of the data, however, increases as the percentage of imputation increases. Figures with imputation rates above 12 percent, particularly, should be used with caution.

Revision to Previous Period Data—Statistics for previous months may be revised due to receipt of corrected data from respondents, including late reports for which imputations were previously made as described above, and other corrections. Figures which have been revised by more than 5 percent from previously published figures are indicated by footnotes.

Reporting Period Adjustment—Since January 1975, the data have been adjusted for the number of working days in the reporting period in order to compensate for differences in individual company reporting patterns, i.e., calendar month, 4-week, 5-week periods.

Seasonal Adjustment—This report presents seasonally adjusted data in table 1A for selected series shown in table 1B. The data were seasonally adjusted using the X-11 variant of the Bureau of the Census Method II seasonal adjustment program. This seasonal adjustment program is a ratio-to-moving average method. The seasonal adjustment program largely eliminates the effect of seasonal variations (intra-year variations repeated constantly from year to year) within the series. The seasonally adjusted data usually provide a better measure than the not seasonally adjusted (original) data of the month-to-month variations which are due to factors other than seasonal pattern.

EXPLANATION OF TERMS

Units of Quantity—Grain ground is measured in bushels of 60 pounds for wheat, and 56 pounds for rye. Flour production is measured in sacks of 100 pounds.

Capacity—Based on replies to the question, "What is the maximum quantity of flour that can be produced in your mill in one day if operated for 24 hours?", the capacity of idle mills is included until the mills are reported to be destroyed, dismantled, or abandoned.

Grain—Represents the purchased weight of grain ground, including the weight of foreign material (dockage).

Millfeed—Includes bran, middlings, shorts, and other milling by products intended principally for use as feed materials.

Wheat Flour—Includes whole wheat flour, farina, industrial flour, and durum flour.

Stocks of Flour (quarterly)—Represents mill stocks in all position, sold and unsold.

COMPARISON OF EXPORT, IMPORT, AND DOMESTIC OUTPUT DATA

The Standard Industrial Classification (SIC) system used for domestic output and the statistical export and import commodity classifications were developed independently and are based on somewhat differing systems of classification. This results in considerable difficulty in comparing the three types of data for many commodity areas. The domestic output classification is based on type of industry; whereas, the export and import classification system is more materials oriented. Aside from the differences in the basic commodity classifications, there are additional problems involving import data, since there are a substantial number of imported commodities, which are not produced in the United States or which are produced only in very small quantities and which, therefore, have no com-

parable domestic output classification. The relationships shown in this report should be considered only as approximations, since, in addition to those mentioned above, there are also the following problems affecting the comparability of the three sets of data:

(a) *Valuation*—There are different methods of valuation for the three types of data.

Domestic Output—Valued at the point of production. It includes the net sales price, f.o.b. plant, after discounts and allowances, exclusive of freight charges and excise taxes.

Exports—Valued at the point of exportation. It includes the selling price, or cost if not sold, and inland freight, insurance, and other charges to the export point.

Imports—Valued at the first port of entry in the United States. It includes c.i.f. (cost, insurance, and freight), duty, and other charges to the import point.

(b) *Duplication in Quantity and Value of Output*—Because producers' shipments of some commodities may be used as materials for incorporation into other commodities, combinations of data for such commodities may contain a certain amount of duplication. Thus, percentages of exports to output or imports to apparent consumption (output plus imports minus exports) at four-digit or broader levels may be understated. Where duplication is known to be substantial, the output data are appropriately noted in the table.

(c) *Low-Valued Export and Import Transactions*—Commodity information is not shown for individual imports valued under \$251. For exports, commodity information is not reported for shipments individually valued under \$251 effective October 1969 and for shipments valued under \$100 prior to October 1969. This is believed to have only negligible effect on the statistics for most commodities.

(d) *Manufacturers' Shipments, Not Specified by Kind*—The value of manufacturers' shipments at the four-digit industry level often includes a small amount which is not distributed among the individual five-digit product classes. Export and import percentages at the more detailed levels might, therefore, be slightly overstated.

(e) *Time Lag Between Output and Exports*—There will be a lag between the time a commodity is produced or shipped by the producer and the time it is actually exported, especially when intermediaries (wholesalers, exporters, etc.) are involved. Ordinarily, this type of discrepancy is insignificant in annual figures.

(f) *"Direct" vs "Total" Commodity Export and Imports*—Export and import data do not include materials which are incorporated into other more finished products and exported or imported in finished form. Thus, by showing only direct exports and imports, the relation of exports to output and imports to apparent consumption for intermediate products is considerably understated.

(g) *Used Commodities*—With a few exceptions, used or rebuilt commodities are classified in the same import or export codes as is new merchandise. Percentages are thus overstated to the extent that used or rebuilt products are significant in trade.

RELATED REPORTS

An annual Current Industrial Report is published in this series. The annual report summarizes monthly figures and incorporates all known revisions in the series for both current and previous year, thus, providing a single reference copy to replace the monthly publications. This annual summary provides additional information on the history of this survey.

The Bureau of the Census also publishes reports on related products as follows:

Series	Frequency	Title
<i>Current Industrial Reports</i>		
M3-1	Monthly	Manufacturers' Shipments, Inventories, and Orders
M20C	Monthly	Confectionery, Including Chocolate Products
<i>Foreign Trade Reports</i>		
FT-410	Monthly	U.S. Exports—Schedule B—Commodity by Country
FT-135	Monthly	U.S. General Imports—Schedule A—Commodity by Country

CONTACTS FOR DATA USERS

Subject Area	Contact	Phone Number
Current Industrial Report M20A	Geraldine Bynum	(301) 763-7807
Foreign Trade publications	Juanita Noone	(301) 763-5140
To order a Census Bureau publication	Daisy Williams	(301) 763-7472
To order Census Bureau microfiche	Dorothy Dunham	(301) 763-5511



U.S. Department of Commerce
BUREAU OF THE CENSUS

Flour Milling Products

SUMMARY FOR 1978

M20A(78)-13
Issued September 1979

SUMMARY OF FINDINGS

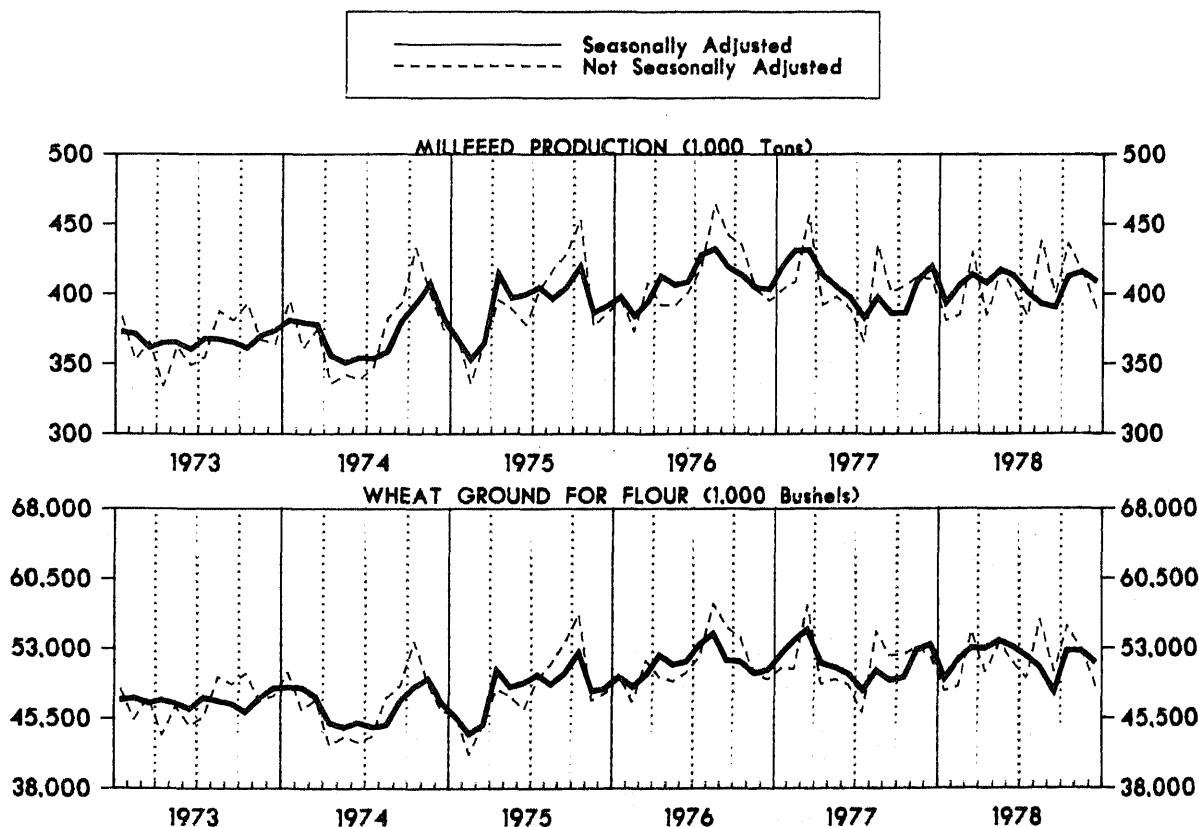
Total commercial production of wheat flour in 1978 amounted to 278 million cwt. sacks, about 2.2 million cwt. sacks above the 1977 production. Production figures in 1978 and 1977 were at 105.4 and 100.9 percent, respectively, of total annual capacity.

Wheat mills in 1978 and 1977 ground 621.3 and 618.1 million bushels of wheat; corresponding millfeed production figures for these years were 4,860 and 4,787 thousand tons.

Production of rye flour in 1978 amounted to 1,640 thousand cwt. sacks, compared with 1,660 thousand cwt. in 1977. Rye grinding in 1978 and 1977 were 3,673 and 3,637 thousand bushels, respectively.

THIS REPORT INCLUDES DATA COMPARING DOMESTIC OUTPUT, EXPORTS, AND IMPORTS

WHEAT FLOUR MILLING: 1973 TO 1978



Address inquiries concerning these figures to U.S. Department of Commerce, Bureau of the Census, Industry Division, Washington, D.C. 20233 or call Geraldine Bynum, (301) 763-7808.

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Table 1. SUMMARY: COMMERCIAL WHEAT MILLING PRODUCTION: 1953 TO 1978

Year	Wheat flour production (1,000 cwt. sacks)	Wheat ground for flour (1,000 bushels)	Millfeed production (1,000 tons)	Average pounds per cwt. sacks of flour		Flour extraction rate ¹ (percent)
				Wheat	Millfeed	
1953.....	222,177	515,446	4,432	139.2	39.9	71.8
1954.....	221,405	514,028	4,440	139.3	40.1	71.8
1955.....	225,648	522,851	4,482	139.0	39.7	71.9
1956.....	229,758	527,159	4,416	137.7	38.4	72.6
1957.....	238,888	548,532	4,584	137.8	38.4	72.6
1958.....	248,004	566,688	4,713	137.1	38.0	72.9
1959.....	250,568	570,856	4,707	136.7	37.6	73.2
1960.....	255,141	582,719	4,827	137.0	37.8	73.0
1961.....	260,316	591,999	4,858	136.4	37.3	73.3
1962.....	262,069	595,353	4,876	136.3	37.2	73.4
1963.....	260,007	589,245	4,794	136.0	36.9	73.5
1964.....	261,663	591,654	4,890	135.7	37.4	73.7
1965.....	250,384	564,724	4,645	135.3	37.1	73.9
1966.....	253,000	568,672	4,619	134.8	36.5	74.1
1967.....	245,240	549,801	4,423	134.5	36.1	74.3
1968.....	254,185	569,649	4,511	134.5	35.5	74.4
1969.....	254,094	567,956	4,458	134.1	35.1	74.6
1970.....	253,094	563,714	4,409	133.6	34.8	74.8
1971.....	249,810	555,092	4,279	133.3	34.3	75.0
1972.....	250,441	557,801	4,303	133.6	34.4	74.8
1973.....	254,661	567,287	4,395	133.7	34.5	74.8
1974.....	251,097	562,962	4,483	134.5	35.7	74.3
1975.....	258,985	582,675	4,701	134.9	36.3	74.1
1976.....	275,077	618,284	4,920	135.0	35.8	74.2
1977.....	275,784	618,125	4,787	134.5	34.7	74.4
1978.....	277,950	621,321	4,860	134.1	35.0	74.6

¹Wheat flour production as compared with the amount of wheat ground.²Based on 1954 Census of Manufactures. See Census report MC-20D, Grain Mill Products.

Table 2. COMMERCIAL WHEAT MILLING PRODUCTION, SEASONALLY ADJUSTED AND UNADJUSTED, BY MONTHS: 1978 AND 1977

Month	Seasonally adjusted			Unadjusted						
	Wheat flour production average per working day ¹ (1,000 cwt. sacks)	Wheat ground for flour (1,000 bushels)	Mill feed production (1,000 tons)	Wheat flour production (1,000 cwt. sacks)		Wheat ground for flour (1,000 bushels)	Mill feed production (1,000 tons)	Average pounds per cwt. sack of flour		Flour extraction rate ² (percent)
				Average per working day ¹	Calendar month, total			Wheat	Millfeed	
1978										
Total.....	(X)	(X)	(X)	(X)	277,950	621,321	4,860	134.1	35.0	74.4
January.....	1,016	49,714	393	990	21,787	48,430	381	133.4	35.0	74.9
February.....	1,096	51,788	406	1,089	21,783	48,910	385	134.7	35.3	74.2
March.....	1,122	53,010	413	1,057	24,330	54,821	430	135.2	35.3	74.0
April.....	1,108	53,000	408	1,127	22,554	50,478	385	134.3	34.1	74.5
May.....	1,111	53,821	417	1,094	24,078	53,601	417	133.6	34.6	74.9
June.....	1,124	53,196	413	1,047	23,051	51,544	402	134.2	34.9	74.5
July.....	1,069	52,176	401	1,063	22,335	49,749	384	133.6	34.4	74.8
August.....	1,087	50,886	393	1,089	25,053	56,062	439	134.3	35.0	74.5
September.....	1,040	48,335	390	1,119	22,456	50,531	400	135.0	35.6	74.1
October.....	1,084	52,742	412	1,129	24,843	55,348	436	133.7	35.1	74.8
November.....	1,093	52,728	415	1,130	23,738	52,934	416	133.8	35.0	74.7
December.....	1,078	51,457	404	1,089	21,942	48,913	385	133.7	35.1	74.8
1977										
Total.....	(X)	(X)	(X)	(X)	275,784	618,125	4,878	134.5	35.4	74.4
January.....	1,060	52,359	419	1,076	22,604	50,852	403	135.0	35.7	74.1
February.....	1,145	53,775	431	1,136	22,716	50,840	409	134.3	36.0	74.5
March.....	1,180	54,965	431	1,121	25,787	57,635	456	134.1	35.4	74.5
April.....	1,058	51,443	413	1,042	21,877	49,184	392	134.9	35.8	74.1
May.....	1,061	50,954	405	1,053	22,121	49,688	398	134.8	36.0	74.2
June.....	1,044	50,196	397	990	21,769	49,072	389	135.3	35.7	74.0
July.....	1,044	48,499	383	1,028	20,566	46,149	366	134.6	35.6	74.3
August.....	1,060	50,659	397	1,062	24,419	54,844	435	134.8	35.6	74.2
September.....	1,075	49,609	386	1,113	23,381	52,244	401	134.1	34.3	74.6
October.....	1,028	49,905	386	1,114	23,396	52,352	406	134.3	34.7	74.5
November.....	1,089	52,846	410	1,133	23,785	53,159	413	134.1	34.7	74.6
December.....	1,072	53,399	419	1,062	23,363	52,106	410	133.8	35.1	74.7

(X) Not applicable.

¹The number of working days per month is computed on the basis of a 5-day week with allowances for the following holidays: January 1, Memorial Day, Independence Day, Thanksgiving Day, and December 25.²Wheat flour production as compared with amount of wheat ground.

Table 3. COMMERCIAL RYE MILLING PRODUCTION, BY MONTHS: 1978 AND 1977

Month	Rye flour production (1,000 cwt. sacks)	Rye ground for flour (1,000 bushels)	Millfeed production (tons)	Average pounds ground per cwt. sack of flour		Flour extraction rate ¹ (percent)
				Rye	Millfeed	
1978						
Total.....	1,624	3,673	20,430	126.7	25.2	79.0
January.....	147	322	1,802	122.7	24.5	81.5
February.....	131	298	1,674	127.4	25.6	78.5
March.....	128	291	1,543	127.3	24.1	80.4
April.....	126	284	1,591	126.2	25.2	79.2
May.....	130	293	1,544	126.2	23.8	79.2
June.....	137	298	1,712	121.8	25.0	82.1
July.....	114	260	1,308	127.7	22.9	78.3
August.....	123	282	1,450	128.4	23.6	77.9
September.....	129	290	1,739	125.9	27.0	79.4
October.....	149	340	1,909	127.8	25.6	78.3
November.....	159	366	2,183	128.9	27.5	77.5
December.....	151	349	1,975	129.4	26.2	77.3
1977						
Total.....	1,660	3,637	19,200	122.7	23.1	81.5
January.....	140	305	1,751	122.0	25.0	82.0
February.....	130	302	1,410	130.1	21.8	76.9
March.....	141	316	1,690	125.5	22.0	79.7
April.....	135	282	1,413	117.0	20.9	85.5
May.....	126	272	1,396	120.9	22.2	82.7
June.....	131	277	1,389	118.4	21.2	84.5
July.....	125	263	1,377	117.8	22.0	84.9
August.....	151	328	1,688	121.6	22.4	82.2
September.....	143	313	1,650	122.6	23.1	81.6
October.....	136	313	1,754	128.9	25.8	77.6
November.....	149	332	1,894	124.8	25.4	80.1
December.....	153	334	1,788	122.2	23.4	81.8

¹ Revised by 5 percent or more from previously published figures.¹ Rye flour production as compared with amount of rye ground.

Table 4. COMMERCIAL WHEAT MILLING PRODUCTION, BY GEOGRAPHIC AREAS: 1978 AND 1977

Geographic areas	1978				1977			
	Wheat ground for flour (1,000 bushels)	Wheat flour production			Wheat ground for flour (1,000 bushels)	Wheat flour production		
		Total (1,000 cwt. sacks)	Daily (24 hour) capacity ¹ (cwt. sacks)	Percent of estimated annual capacity ²		Total (1,000 cwt. sacks)	Daily (24 hour) capacity ¹ (cwt. sacks)	Percent of estimated annual capacity ²
United States, total.....	621,321	277,950	1,058,873	103.3	618,125	275,784	1,072,143	100.9
Middle Atlantic Division.....	83,016	37,118	149,451	97.8	79,695	35,981	138,781	101.5
New York.....	66,356	30,041	123,688	95.4	62,175	28,008	105,732	103.6
North Central Division.....	335,429	150,386	570,828	103.7	338,391	150,371	589,622	99.9
Ohio.....	33,000	14,445	57,445	99.8	33,967	14,727	62,201	93.1
Indiana.....	14,878	6,430	28,090	90.4	15,165	6,486	21,483	121.1
Illinois.....	36,638	16,180	59,482	107.9	36,662	16,064	60,355	104.9
Michigan.....	10,416	4,446	20,220	87.5	9,147	4,153	20,049	81.4
Minnesota.....	70,398	31,939	128,038	98.2	70,372	32,236	128,011	98.8
Iowa.....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
Missouri.....	54,552	24,780	86,310	113.4	53,502	23,881	86,762	107.6
Nebraska.....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
Kansas.....	76,843	34,731	123,048	111.2	78,524	35,769	135,158	103.9
South Atlantic Division.....	38,500	16,587	68,157	95.8	38,615	16,986	61,838	107.4
East South Central Division.....	30,834	13,389	49,788	105.4	31,504	13,610	48,293	111.2
Tennessee.....	23,939	10,435	37,817	108.1	24,574	10,641	36,817	112.8
West South Central Division.....	42,190	18,613	65,893	111.0	40,507	18,198	63,530	111.5
Oklahoma.....	17,146	7,889	28,345	110.9	16,511	7,526	28,037	105.4
Texas.....	18,259	7,830	26,500	114.2	17,059	7,497	28,158	105.0
Mountain Division.....	34,758	15,716	60,175	103.1	33,688	15,158	66,531	88.7
Montana.....	8,395	3,931	13,736	110.5	8,170	3,861	17,797	84.1
Utah.....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
Pacific Division.....	56,594	26,141	94,581	108.8	55,725	25,480	103,548	96.1
Washington.....	16,573	7,413	27,781	104.2	15,696	7,076	27,481	102.8
Oregon.....	9,441	4,293	19,800	85.4	9,398	4,238	20,025	83.1
California and Hawaii.....	30,580	14,435	47,000	120.9	30,631	14,166	56,042	99.2

Note: Detail may not add to total due to independent rounding.

(D) Withheld to avoid disclosing figures for individual companies.

¹ Capacity as reported for December of each year.² Estimated annual capacity is obtained by multiplying daily capacity by the number of work days during the year: 254 for 1978, and 255 for 1977.

These figures are calculated on the basis of a five day week with allowances for the following holidays unless such holidays fall on Saturday: January 1, Memorial Day, July 4, Thanksgiving Day, and December 25.

Table 5. PRODUCTION AND MILL STOCKS OF WHEAT FLOUR, BY QUARTERS: 1978 AND 1977

Quarter	Production (1,000 cwt. sacks)	Mill stocks (1,000 cwt. sacks)
1978		
First quarter.....	67,900	4,096
Second quarter.....	69,683	3,459
Third quarter.....	69,844	3,342
Fourth quarter.....	70,523	3,214
1977		
First quarter.....	71,107	4,248
Second quarter.....	65,767	4,167
Third quarter.....	68,366	3,537
Fourth quarter.....	70,544	4,160

Table 6. DURUM WHEAT PRODUCTS: 1978 AND 1977

Item	1978		1977	
	Jan. 1- June 30	July 1- Dec. 31	Jan. 1- June 30	July 1- Dec.31
Durum wheat ground (thousand bushels).....	17,683	19,748	18,673	19,056
Straight semolina and durum flour produced (thousand sacks (cwt.))...	7,786	8,702	8,110	8,253
Blended semolina and durum flour produced (thousand sacks (cwt.))....	(D)	(D)	(D)	(D)

(D) Withheld to avoid disclosing figures for individual companies.

Table 7. PRODUCTION, EXPORTS, AND IMPORTS OF WHEAT FLOUR: 1978

(Quantity in 1,000 cwt.; value in \$1,000)

Product code	Item	Quantity produced	Exports of domestic merchandise ^{1 2}		Percent exports to manufac- turers' production
			Quantity	Value	
20411 --	Wheat flour.....	277,950	21,523	189,259	7.7

Note: Comparison of domestic production and export codes is as follows:

<u>Domestic output</u>	<u>Exports</u>
20411 -- Wheat flour	1,314,010

¹The data as shown for exports have been revised to include Schedule B code 131.4020 which was previously excluded in error.²Source: Bureau of the Census Report FT-410, U.S. Exports of Domestic Merchandise; SIC-Based Products and Area.

DESCRIPTION OF SURVEY

Scope of Survey—This survey covers firms engaged in the production of wheat and rye flour. The reporting panel consists of mills with a daily capacity of over 400 sacks of flour.

Sampling Description—The data shown in this publication were collected on Bureau of the Census monthly Form M20A, Flour Milling Products. The aggregates published in this report have been compiled from a sample of approximately 250 respondents accounting for 98 percent of the total U.S. production of flour mill products. The universe for this sample was the 1977 Census of Manufactures. Approximately 200 small establishments are in the nonmail universe. Their production data are estimated based upon their 1977 Census of Manufactures report. The monthly reporting panel was selected by arraying the reporting units in descending order by size for each product line, then choosing a sufficient number of respondents (beginning with the largest) to yield a coverage of approximately 98 percent for each product line.

Scope of Survey—This survey includes firms engaged in the respondents in the reporting panel whose reports were not received in time for tabulation, as well as for 200 small respondents excluded from the mail panel. Missing figures for companies in the reporting panel are imputed from the month-to-month movements shown by reporting firms. The overall imputation rate is generally limited to 12 percent, including about 2 percent for small respondents excluded from the monthly reporting panel. Individual items with a higher than 12-percent imputation rate are footnoted.

The imputation rate is not an explicit indicator of the potential error in published figures due to nonresponse, both because the actual monthly movements for nonrespondents may or may not closely agree with the imputed movements, and because the estimates for nonpanel cases may reflect their current activity. The probable difference between the actual and imputed figures is unknown. The degree of uncertainty regarding the accuracy of the data, however, increases as the percentage of imputation increases. Figures with imputation rates above 12 percent, particularly, should be used with caution.

Revision to Previous Period Data—Statistics for previous months may be revised due to receipt of corrected data from respondents, including late reports for which estimates were previously made as described above, and other corrections. Figures which have been revised by more than 5 percent from previously published figures are indicated by footnotes.

Reporting Period Adjustment—Since January 1975, the data have been adjusted for the number of working days in the reporting period in order to compensate for differences in individual company reporting patterns, i.e., calendar month, 4-week, 5-week periods.

Seasonal Adjustment—This report presents seasonally adjusted and unadjusted data in table 2. The data were seasonally adjusted using the X-11 variant of the Bureau of the Census

Method II seasonal adjustment program. This program is a ratio-to-moving average method. It largely eliminates the effect of seasonal variations (intra-year variations repeated constantly from year to year) within the series. The seasonally adjusted data provide a better measure of the month-to-month variations which are due to factors other than seasonal pattern. Additional information concerning seasonal adjustment is available in the seasonal adjustment supplement issued in this series.

EXPLANATION OF TERMS

Units of Quantity—Grain ground is measured in bushels of 60 pounds for wheat, 56 pounds for rye. Flour production is measured in sacks of 100 pounds.

Capacity—Based on replies to the question "What is the maximum quantity of flour that can be produced in your mill in one day if operated for 24 hours?" The capacity of idle mills is included until the mills are reported to be destroyed, dismantled, or abandoned.

Grain—Represents the purchased weight of grain ground, including the weight of foreign material (dockage).

Millfeed—Includes bran, middlings, shorts, and other milling byproducts intended principally for use as feed materials.

Wheat flour—Includes whole wheat flour, farina, industrial flour, and durum flour.

Stocks of Flour (quarterly)—Represents mill stocks in all positions, sold and unsold.

COMPARISON OF EXPORT, IMPORT, AND DOMESTIC OUTPUT DATA

The Standard Industrial Classification (SIC) system used for domestic output and the statistical export and import commodity classifications were developed independently and are based on somewhat differing systems of classification. This results in considerable difficulty in comparing the three types of data for many commodity areas. The domestic output classification is based on type of industry; whereas, the export and import classification system is more materials oriented. Aside from the differences in the basic commodity classifications, there are additional problems involving import data, since there are a substantial number of imported commodities which are not produced in the United States or which are produced only in very small quantities and which, therefore, have no comparable domestic output classification. The relationships shown in this report should be considered only as approximations, since, in addition to those mentioned above, there are also the following problems affecting the comparability of the three sets of data:

a. *Valuation*—There are different methods of valuation for the three types of data.

Domestic Output—Valued at the point of production. It includes the net sales price, f.o.b. plant, after discounts and allowances, exclusive of freight charges and excise taxes.

Exports—Valued at the point of exportation. It includes the selling price, or cost if not sold, and inland freight, insurance, and other charges to the export point.

Imports—Valued at the first port of entry in the United States. It includes c.i.f. (cost, insurance, and freight), duty, and other charges to the import point.

b. Duplication in Quantity and Value of Output—Because producers' shipments of some commodities may be used as materials for incorporation into other commodities, combinations of data for such commodities may contain a certain amount of duplication. Thus, percentages of exports to output or imports to apparent consumption (output plus imports minus exports) at four-digit or broader levels may be understated. Where duplication is known to be substantial, the output data are appropriately noted in the table.

c. Low-Valued Export and Import Transactions—Commodity information is not shown for individual imports valued under \$251. For exports, commodity information is not reported for shipments individually valued under \$251 effective October 1969 and for shipments valued under \$100 prior to October 1969. This is believed to have only negligible effect on the statistics for most commodities.

d. Manufacturers' Shipments, Not Specified by Kind—The value of manufacturers' shipments at the four-digit industry level often includes a small amount which is not distributed among the individual five-digit product classes. Export and import percentages at the more detailed levels might, therefore, be slightly overstated.

e. Time Lag Between Output and Exports—There will be a lag between the time a commodity is produced or shipped by the producer and the time it is actually exported, especially when intermediaries (wholesalers, exporters, etc.) are involved. Ordinarily, this type of discrepancy is insignificant in annual figures.

f. "Direct" vs "Total" Commodity Export and Imports—Export and import data do not include materials which are incorporated into other more finished products and exported or imported in finished form. Thus, by showing only direct exports and imports, the relation of exports to output and imports to apparent consumption for intermediate products is considerably understated.

g. Used Commodities—With a few exceptions, used or rebuilt commodities are classified in the same import or export codes as is new merchandise. Percentages are thus overstated to the extent that used or rebuilt products are significant in trade.

HISTORICAL NOTE

The current M20A series of monthly reports with annual summaries of wheat ground and wheatmilling products originated in May 1923. Data by States have been published monthly since 1927. Beginning in 1931 and ending with the June 1947 report, monthly wheat flour production by capacity groups was published. The annual summary report during the years 1931 to 1964 also contained a table showing production by capacity groups. Past copies of this report and other Current Industrial Reports can be found in the Federal Depository Library in your area. These libraries keep Current Industrial Reports (called Facts for Industry, before 1959) permanently available.

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